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A MOSO HERDER AT LICHANG



A HUNTER ON THE BURMA FRONTIER



MOSO WOMAN



A TIBETAN NOMAD

A Naturalist's Journey Across Little Known Yunnan

Notes of a Zoological Expedition under the Auspices of the American Museum of Natural History

By Roy Chapman Andrews, author of "Camps and Trails in China," etc.

The American Museum of Natural History has for some time been devoting attention to the discovery of the place of origin of primitive man, and as a result of researches in this direction has arrived at the belief that the earliest remains of the human inhabitants of the world will be found somewhere in Central Asia, north of the Himalaya Mountains. It was, therefore, desired to make a systematic scientific investigation of the Central Asiatic plateau, and with this object in view the Museum authorities decided to despatch preliminary expeditions to gain a general knowledge of the natives, the fauna, and the conditions to be encountered; the first reconnaissance, in charge of Mr. Roy Chapman Andrews, which was intended to be largely a mammalian survey, being sent from New York to Yunnan in March, 1916.

It was expected that the southwestern portion of Yunnan would yield valuable results of a zoological character, and that expectation having been fully borne out further expeditions will investigate other regions contiguous to the great plateau of Central Asia before a big body of scientists is sent out to carry on prolonged investigations on a large scale.

It is believed that the successive invasions that poured into Europe from the east, into India from the north, and into China from the west came from this region. Mr. Andrews points out that the Central Asian plateau at the beginning of the Pleistocene was probably less arid than it is to-day, and there is reason to believe that this general region was the distributing centre not only of man but also of many of the forms of mammalian life now found in other parts of the world. For instance, American moose, the wapiti or elk, the Rocky Mountain sheep, the so-called mountain goat, and other animals are probably of Central Asian origin. Doubtless there were many causes that contributed to the extensive wanderings of primitive tribes; but, as these tribes were primarily hunters, one of the most important must have been the movements of the game upon which they lived. Therefore the study of the early human races is necessarily closely connected with, and dependent upon, a knowledge of the Central Asian mammalian life and its distribution. No systematic paleontological, archeological, or zoological study of this region on a large scale has ever been attempted, and it is safe to say that there is no similar area of the inhabited surface of the earth about which so little is known. The American Museum of Natural History hopes in the near future to conduct extensive explorations in this part of the world and in this connection Mr. Andrews is once again in China preparing to explore parts of Kansu Province and the Kokinor region with the object of deciding upon a central site for a permanent camp as headquarters for the group of scientists who will co-ordinate their investigation work for a period of years. The selection of such a central camp necessitates careful investigation and consideration. The country within which operation will ultimately be conducted and its inhabitants present unusual obstacles to scientific research. Not only is the region one of vast intersecting mountain ranges, the greatest of the earth, but the climate is too cold in winter to permit of continuous work. The people have a natural dislike for foreigners, and political events in the last half century have not tended to decrease their suspicions.

It is possible, indeed, to overcome such difficulties, but the plans for extensive research must be carefully prepared.



CHINESE GIRL NEAR
MENGTING

THE destination of the First Asiatic Zoological Expedition under the auspices of the American Museum of Natural History was the southwestern most province of China. This is one of the least-known parts of the Chinese Republic, and, because of its southern latitude and high mountain systems, the climatic and faunal range is very great. It is about equal in size to the state of California and topographically might be likened to the ocean in a furious gale, for the greater part of its surface has been thrown into vast mountain waves which divide and cross one another in hopeless confusion.

Yunnan is bordered on the north by Szechuan and a small portion of Tibet, on the west by Burma, on the south by Tonking, and on the east by Kweichau and Kuangsi Provinces. Faunistically the entire northwestern part of Yunnan is essentially Tibetan, and the plateaux and mountain peaks range from altitudes of 8,000 feet to 20,000 feet above sea level. In the south and west along the borders of Burma and Tonking, in the low fever-stricken valleys, the climate is that of the mid-tropics, and the native life as well as the fauna and flora are of totally different types from those found in the north.

The natives of Yunnan are exceptionally interesting. There are about thirty non-Chinese tribes in the province, some of which, such as the Shans and Lolos, represent the aboriginal inhabitants of China. It is safe to say that in no similar area of the world is there such a variety of languages and dialects spoken as in this region.

The white members of the Expedition included Mr. Edmund Heller, whose attention was chiefly devoted to the collection of small mammals; my wife, Yvette Borup Andrews, who acted as photographer; and myself, in general charge of the party. A Chinese interpreter, Wu Hung-tao, with five native assistants and ten mule-teers completed the personnel. After a short side trip in the Province of Fukien, to hunt tigers, we outfitted in Hongkong and in late August left for Yunnan by way of the French railroad through Tonking.

Effects of Deforestation

On September 9, 1917, we left Yunnanfu with a caravan of thirty-three mules and horses. Our destination was Talifu, the largest city in central Yunnan, fourteen days' travel directly west. When we were fairly launched upon our long ride the time slipped by in a succession of delightful days. Since this was the main caravan route, the *mafoos* (mule-teers) had regular stages beyond which they would not go. If we did not stop for luncheon the march could be ended early in the afternoon and we could settle ourselves for the night in a temple, which always proved a veritable "haven of rest" after a long day in the saddle.

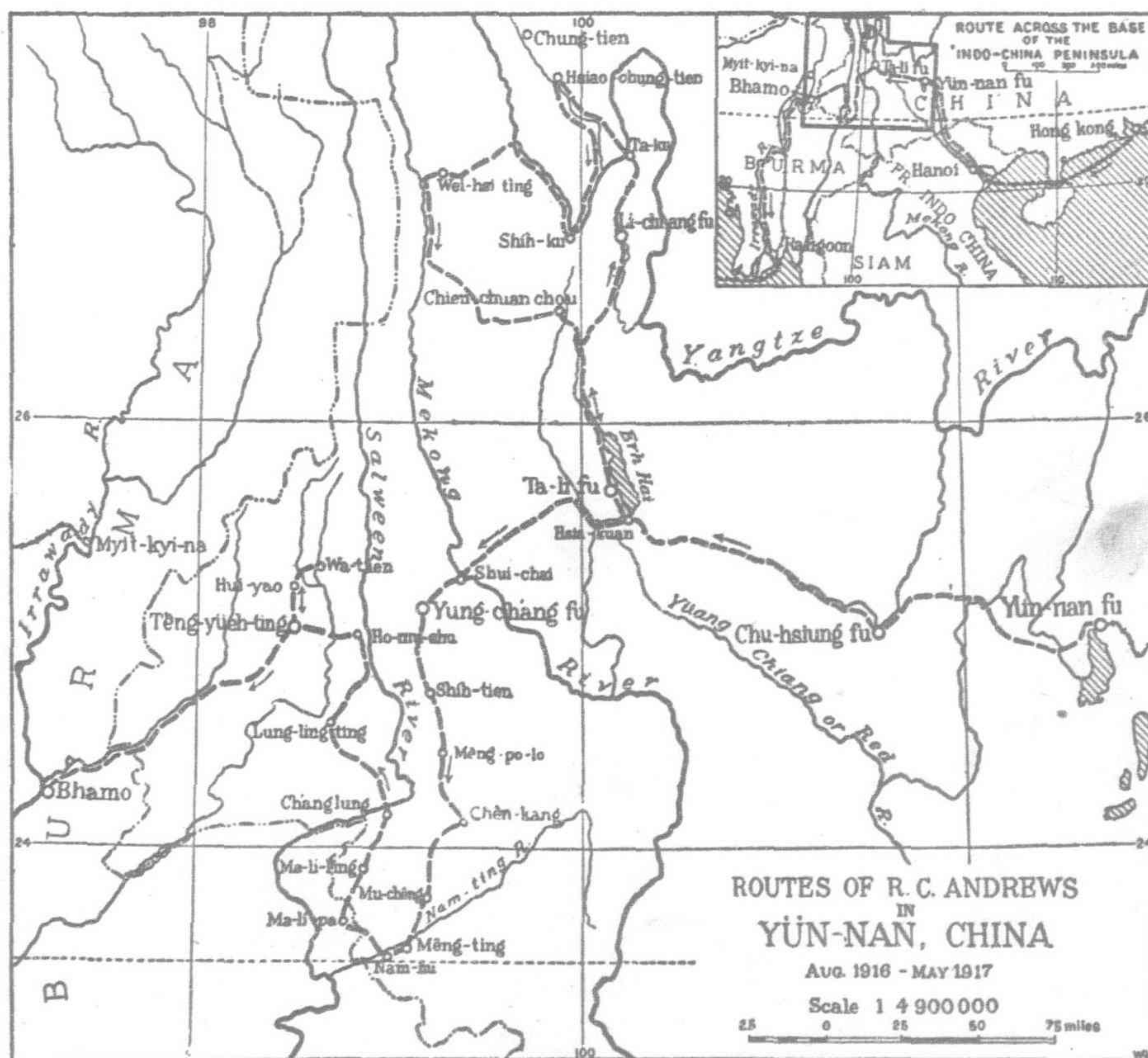
With the total lack of conservation ideas so characteristic of the Chinese, every available bit of natural forest has been cut away along the road. As a result the mountains are desert wastes of sandstone alternating with grass-covered hills sometimes clothed with groves of pines or spruces. These trees have all been planted and, before they have reached a height of fifteen or twenty feet, will yield to the insistent Chinese demand for wood.

The ignorance of the need of forest conservation is an illuminating commentary on Chinese education. Mr. William Hanna, a missionary of Talifu, told us that one day he was riding over this same road with a Chinese gentleman who was considered to be one of the best educated and most learned men of the province. Pointing to the barren hills washed clean of soil and deeply worn by countless floods, Mr. Hanna remarked that all this could have been prevented and that instead of a rocky waste there might have been a fertile hillside had the trees been left to grow. The Chinese scholar listened in amazement to facts which every western schoolboy has learned before he is twelve years old, but of which he was ignorant because they are not a part of Confucius' teachings. To study modern science is considered a waste of time by the orthodox Chinese, for "everything good must be odd," and all his life he delves into the past, utterly neglectful of the present.

On the Bad Road to Talifu

For centuries the road to Talifu has been one of the main trade arteries through the province, and yet in places it was almost impassable. The Chinese have a proverb which says: "A road is good for ten years and bad for ten thousand," and this applies most excellently to those of Yunnan. The main highways are paved with huge stones but after a few years' wear the blocks usually become broken and irregular, the earth is washed from between them, and they become upturned at impossible angles. The result is a chaotic mass which by no stretch of the imagination can be called a good road. Where the stones are still in place they have been worn to such glass-like smoothness by the thousands of passing animals that it is well-nigh impossible to walk upon them. As a result a caravan avoids the paving wherever it can find another path, and sometimes dozens of deeply cut trails wind over the hills beside the road. There are but very few spots where one can trot a horse without grave danger to one's self or the animal.

The journey to Talifu from Yunnanfu consists of thirteen stages but were the roads kept in even fair condition it could be accomplished in about two-thirds of that time. Moreover the wear and tear of transport, both on loads and animals could be very materially reduced. Apparently but little or no work is being done upon the road for we saw practically no indications



MAP SHOWING THE ROUTE TRAVERSED BY THE EXPEDITION

of repairs or reconstruction except where some lone beggar had established himself at a particularly bad place and for his feeble efforts at straightening the stone blocks collected a few cash from the caravan leaders.



YUNNAN PACK SADDLE

Since this is a portion of the direct route from Yunnanfu to Burma, via Hsiakuan, Yungchang, Tengyueh and Bhamo, the traffic is very heavy. Every day we passed dozens of caravans, carrying salt or goods of various kinds. Sometimes several *mafoos* had joined forces for mutual protection and we would have to draw up beside the road while 250 or 300 laden mules slipped and slid past us over the glassy stones.

Although none of the main caravan roads of Yunnan held much of interest for us as naturalists, yet as students of native customs they were fascinating, for the life of the province continually passed before us in panoramic completeness. Chinese villages in the south are usually marvels of utter and abandoned filth, and, although those of Yunnan were not brilliant exceptions to the rule, nevertheless, they were considerably cleaner than the coast cities. Pigs, chickens, horses and cows live in happy contentment with the human inmates of the houses, the pigs especially being treated as we favor dogs at home. On the doorsteps children play with the swine, patting and pounding them, and one of our friends said that he had actually seen a mother bring her baby to be nursed by a sow with her family of piglets. Yunnan hams are far famed in south China, and in every village one would usually see a pig or two being dressed or scraped in the delightful publicity of the main street.

The natives were pleasant and friendly, and seemed to be industrious. Every valley along the road was green with rice fields and wherever the deforestation had left sufficient soil on the hillsides patches of corn took the place of the former poppy fields.

As we neared Talifu, and indeed along the entire road, we were amazed at the prevalence of goiter. At a conservative estimate two out of every five persons were suffering from the disease, some having two, or even three, globules of uneven size hanging from their throats. In one village six out of seven adults were affected; apparently children under twelve or fourteen years are free from it, as we saw no evidences in either sex. Probably the disease is in a large measure due to the drinking water, for it is most prevalent in the limestone regions and seems to be somewhat localized.

On Friday, September 24, we reached Hsiakuan, a large commercial town at the lower end of Erh Hai, the lake near which Talifu lies. Many merchants live there, and it is by all means the most important business place of interior Yunnan; Tali, eight miles away, is the residence and official city.

This was the hottest day of our experience in the northern part of the province, the thermometer registering 85° in the

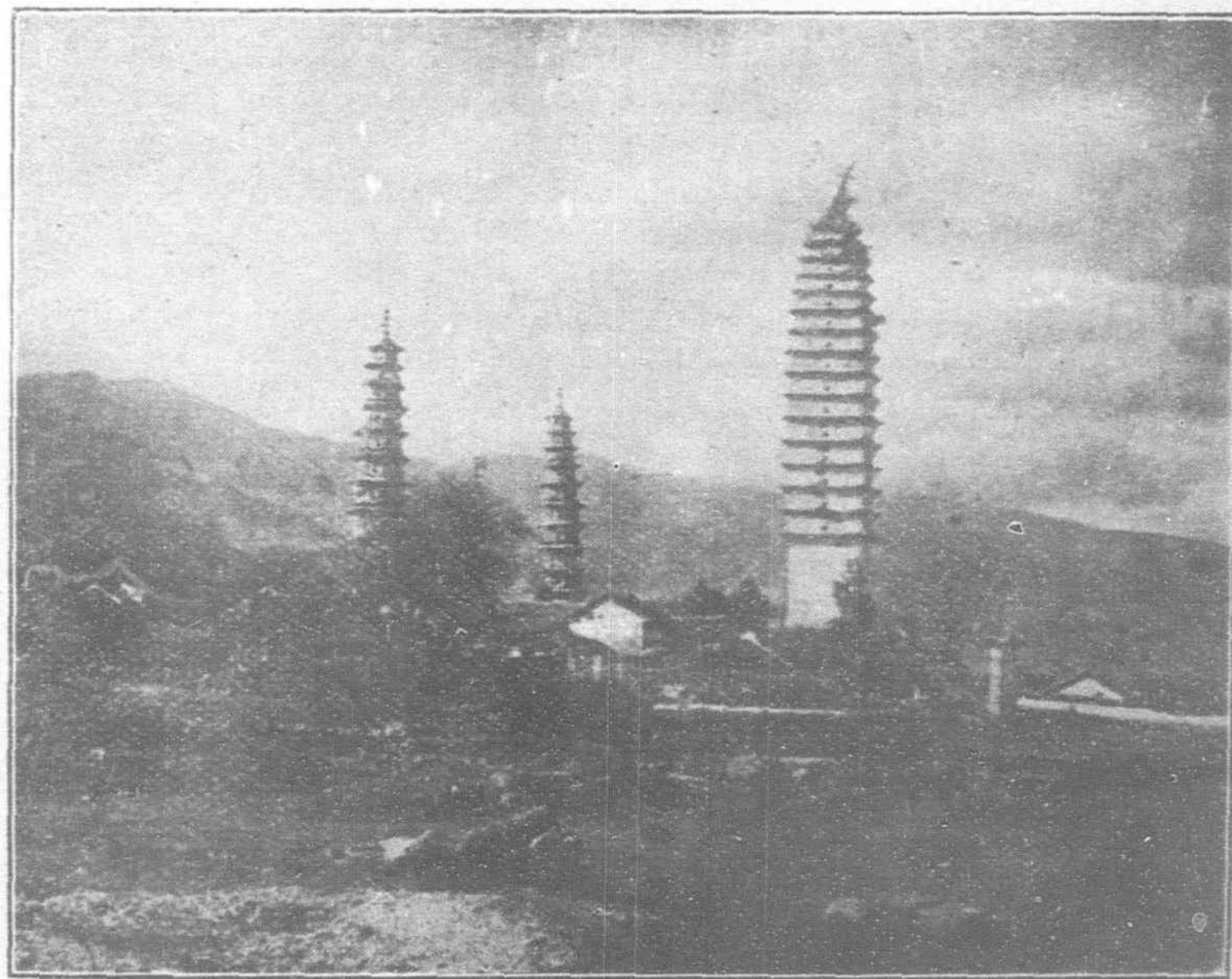
shade. This is the usual mid-summer temperature, but the moment the sun dropped behind the mountains it was cool enough for one to enjoy a fire. Even in winter it is never very cold, and the delightful summer should make northern Yunnan a wonderful health resort for residents of fever-stricken Burma and Tonking.

Hsiakuan is splendidly situated from the standpoint of trade, for the great caravan routes from Yunnanfu to Bhamo, and from Tibet to the tea regions in the south of the province, intersect at this point. One may see a dozen or more tribes represented in its market almost any day, from the huge fur-clad Tibetans of the north, to the slender yellow-skinned Shans of the Burma frontier. It is a walled city and is of considerable strategic importance, guarding, as it does, the mountain pass at the foot of the lake. Many of its houses, like those on the way to Talifu, are built of the cobble stones with which the base of the mountains are thickly strewn, and are strikingly unlike the mud huts which border the road from Yunnanfu.

Talifu its Lake and Mountains

We rode toward Tali over a perfectly smooth paved road which was as slippery as glass, with the beautiful lake on our right hand and on the other the Tsang Shan, which rise to a height of 14,000 feet. As we approached the city we could see dimly outlined against the mountains the slender shafts of three ancient pagodas. They were erected to the spirits of the "earth, wind, and water" and for over fifteen hundred years have stood guard over the stone graves which, in countless thousands, are spread along the foot of the mountains like a vast gray blanket. In the late afternoon sunlight the walls of the city seemed to recede before us, and the picturesque gate loomed shadowy and unreal even when we passed through its gloomy arch and clattered up the stone-paved street.

Besides Mr. Evans, the representative of the British-American Tobacco Company, the foreign residents of Talifu include the Rev. William J. Hanna, his wife, and two other women, all of the China Inland Mission. Mr. Hanna is doing a really splendid work, especially along educational and medical lines. He has built a beautiful little chapel and a large school and dispensary in connection with his house, where he and his wife are occupied every morning treating the minor ills of the natives, Christian and heathen alike.



PAGODAS AT TALIFU

Talifu was the scene of tremendous slaughter at the time of the Mohammedan war, when the Chinese captured the city through the treachery of its commander and turned its streets into rivers of blood. The Mohammedans were almost exterminated, and the ruined stone walls testify to the completeness of the Chinese devastation.

There are extensive quarries close to Talifu, where the figured marble slabs so greatly admired by the Chinese are obtained in large quantities. I am told that this product is sent to all parts of China, and we often saw caravans transporting it towards Yunnanfu. Those slabs in which a landscape picture is formed naturally by green, black or brown stains are most in demand, but the stone cutters' etch and color the marble so cleverly that it is only by careful inspection that the fraud can be detected.

Where Rare Furs are Common

Talifu and Hsiakuan are large fur markets, and we spent some time investigating the shops. One important find was the panda (*Ailuropus fulgens*). The panda is an aberrant member of the raccoon family but looks more like a fox; in fact the Chinese call it the "fire fox" because of its beautiful red fur. Pandas were supposed to be exceedingly rare, and we could hardly believe our eyes when we saw dozens of coats made from their skins hanging in the fur shops.

Skins of the huge red-brown flying squirrels, *Petaurista yunnanensis*, were also used for clothing, and the abundance of this animal was almost as great a surprise as were the pandas. This is often the case with supposedly rare species. A few specimens are first secured, perhaps from the extreme limits of its range or from a locality where it really is rare, and for years such specimens may be unique in museum collections; but eventually the proper locality may be visited and the animals found to be abundant.

We saw several skins of the beautiful cat *Felis temmicki*, which, with skins of the snow leopard (*Felis uncia*), were said to have come from Tibet. Civets, bears, foxes, and small cats were being used extensively for furs, and pangolins could be purchased in the medicine shops. The scales of the pangolin are considered of great value in the treatment of certain diseases, and the skins are usually sold by the pound, as are the horns of deer, wapiti, gorals, and serows.

Almost all of the fossil animals which have been obtained in China by foreigners have been purchased in apothecary shops. If a Chinaman discovers a fossil bed he guards it zealously for it is as good as a gold mine to him. The bones are ground into a fine powder and when mixed with an acid produce a phosphate which has in reality a certain value as a tonic. When a considerable amount of faith and Chinese superstition is added, its efficacy is doubled.

Picturesque Tribes at Lichiangfu

We left a portion of our outfit at Talifu and with a new caravan of twenty-five animals traveled northward for six days to Lichiangfu. We took a byroad in the hope of finding good collecting in the pine forests three days from Tali but instead found a total absence of animal life. The woods were beautiful parklike stretches which in a

country like California would be full of game but here were silent and deserted. On the third day we passed two coal mines which were being operated by Chinese in a most primitive way but appeared to be yielding excellent results. During the fourth and fifth days we were still in the forests but on the sixth crossed a pass 10,000 feet high and descended abruptly into a long marshy plain where the gray outlines of Lichiang were dimly visible against the mountains at the far end.

The city is a most interesting place, especially on market day, for its inhabitants represent many different tribes, with comparatively few Chinese. By far the greatest percentage of natives are the Mosos, who are semi-Tibetan in their life and customs. They were originally an independent race ruling a considerable portion of northern Yunnan and having Lichiang as their capital. To the Chinese they are "barbarians," but we found them to be simple, honest, and wholly delightful people. Many of those whom we met later had never seen a white woman, and yet their inherent decency was in the greatest contrast to the Chinese, who consider themselves immeasurably their superior.

The Mosos have large herds of sheep and cattle, and this is the one place which I have visited in the Orient, except in large cities along the coast, where we could obtain fresh milk and butter. With them as with the Tibetans buttered tea and *tsamba* (parched oatmeal) are the great essentials. Buttered tea is prepared by churning fresh butter into hot tea until the two have become well mixed. It is then thickened with finely ground *tsamba* until a ball is formed which is eaten with the fingers. The combination is decidedly good when the ingredients are fresh, but if the butter happens to be rancid the less said of it the better. The Mosos also raise great quantities of excellent squash, turnips, carrots, cabbage, potatoes, onions, corn, peas, beans, oranges, pears, persimmons, and nuts. While traveling we had our saddle pockets filled with pears and English walnuts or chestnuts and could replenish our stock from almost any village along the road. Everything was absurdly cheap. Eggs were usually about eight cents (Mexican) a dozen, and we could always purchase a chicken for an empty tin can, or two for a bottle. In fact bottles were in great demand, and when offers of money failed to induce a native to pose for the camera a bottle would nearly always decide him.

As at Talifu, furs are an important article of trade in Lichiang, and great quantities of foxes, wild cats, sheep and lambskins are brought in by the Tibetans. Flying squirrels also come from the west near the Mekong river. The skins are beautifully tanned and dressed in the city and ought to form a very profitable article of export if proper facilities were given.

Shooting on the Snow Mountain

At Lichiang we learned that there was good shooting only twelve miles north of the city on the Snow Mountain range, the highest peak of which rises 18,000 feet above the sea. Proceeding thither we camped in a beautiful little meadow at an altitude of 12,000 feet, and for a month had some remarkably successful hunting on the slopes of the Snow Mountain. Our attention was chiefly centered upon gorals and serows, of which we obtained a splendid series.

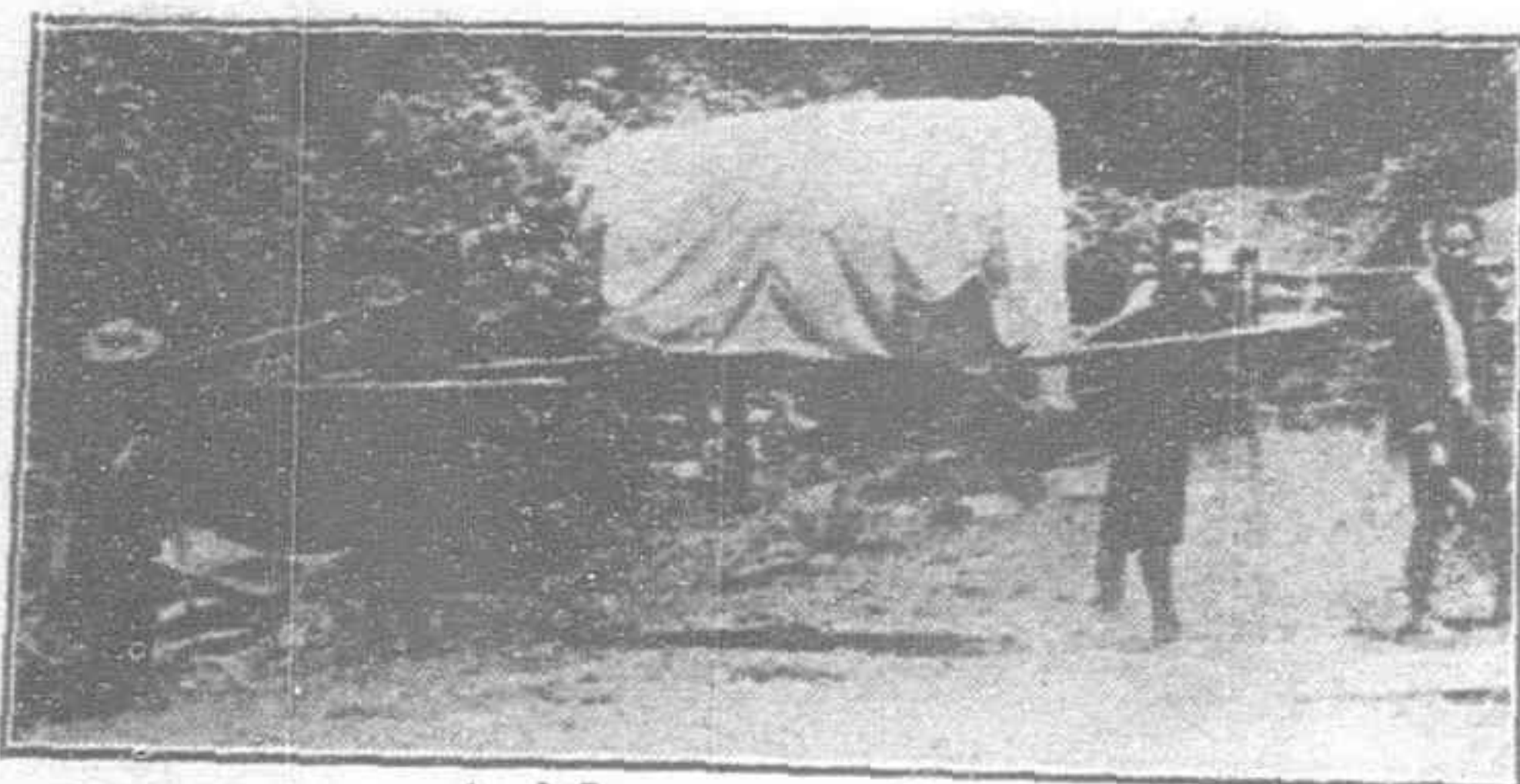
These animals belong to the subfamily *Rupicaprinae*, which is an early mountain-dwelling offshoot of the Bovidae; this subfamily also includes the chamois, takin, and the so-called Rocky Mountain goat of America. The group is commonly referred to as "goat-antelopes" in order to express the intermediate position which they are supposed to hold between the true goats and antelopes. They are also sometimes called the Rupicaprine antelopes from the scientific name of the chamois (*Rupicapra*).



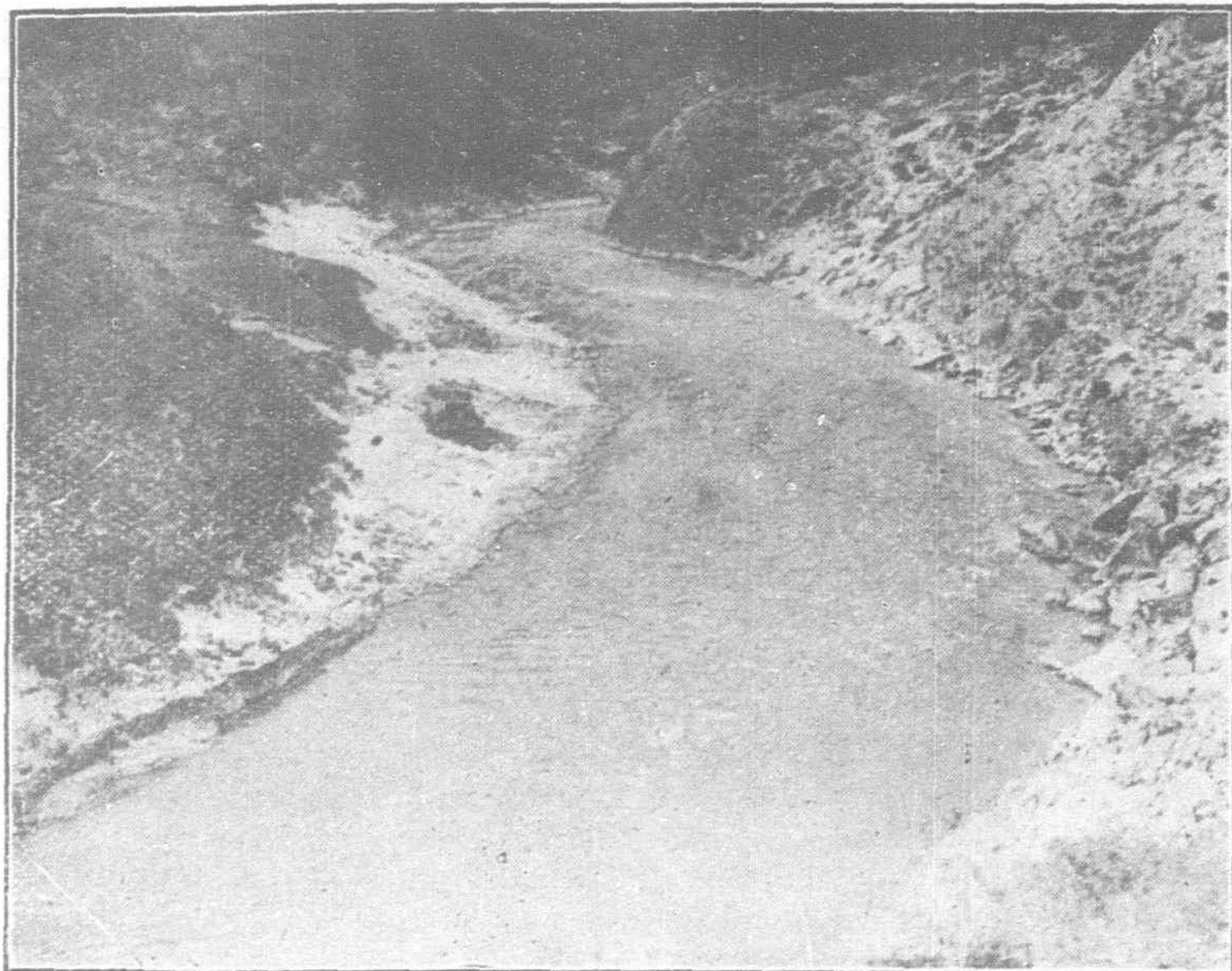
MOSO GIRL AT LIKIANG



A SHAN GIRL



A MOUNTAIN CHAIR



THE TAKU FERRY ACROSS THE YANGTZE

The horns of all members of the group are finely ridged and subcylindrical. They are present in both sexes, being almost as long in the female as in the male. Although no one would suspect that the gorals are more closely related to the takins than to the serows, which they resemble superficially, such seems to be the case, but the cranial differences between the two genera are to a certain extent bridged over by the skull of the small Japanese serow (*Capricornulus crispus*). One of the principal differences, besides that of size, is in the fact that the serows have a short tail and a well-developed face gland, which opens in front of the eyes by a small orifice, while the gorals have a long tail and no such gland.

Magnificent Gorges of the Upper Yangtze

In mid-November we left the Snow Mountain with a caravan of twenty-six mules and horses. Following the road from Lichiang to the Yangtze we crossed the "Black Water" and climbed steadily upward over several tremendous wooded ridges each higher than the last to the summit of the divide.

The descent was gradual through a magnificent primeval pine and spruce forest. Some of the trees were at least 150 feet high and were draped with beautiful gray moss which had looped itself from branch to branch and hung suspended in delicate streamers yards in length. The forest was choked with underbrush and a dense growth of dwarf bamboo, and the hundreds of fallen logs carpeted with bronze moss made ideal conditions for small mammal collecting. However, as the species would probably all be similar to those we had secured on the Snow Mountain we did not feel that it was worth while stopping to trap.

Two days later we rode along a broad trail through a beautiful pine forest and stood on an open summit gazing on one of the most impressive sights which China has to offer. At the left, and a thousand feet below, the mighty Yangtze has broken through the mountains and made a gorge a mile deep, a gorge which seems to have been carved out of the solid rock sharp and clean as by a giant's knife. A few miles to the right the mountains widen, leaving a flat plain two hundred feet above the river. Every inch of this plain, as well as the finger-like valleys which stretch upward between the hills, is under cultivation, giving support to three villages, the largest of which is Taku.

The ferry is in a bad place, but it is the only spot for miles where the river can be crossed. The right (east) bank is so precipitous that the narrow trail from the plain twists and turns like a snake before it emerges upon a narrow sand and gravel beach. The opposite side of the river is a vertical wall of rock which slopes back a little at the lower end to form a steep hillside covered with short grass. The landing place is a mass of jagged rocks fronting a small patch of still water, and the trail up the

fact of the cliff is so steep that it cannot be climbed by any loaded animal, so that all the packs had to be unstrapped and laboriously carted up the slope on the backs of the *mafoos*.



Cave Men and Gold Diggers,

The cliffs above the river are honeycombed with caverns. They are of two kinds, gold quarries and dwelling caves. The latter consist of a long central shaft, which widens into a circular room, and is just high enough to allow a man to stand erect. Along the sides of the corridor shallow nests have been scooped out to serve as beds, and all the cooking is done not far from the door. The caves, although almost dark, make fairly comfortable living quarters and are by no means as dirty or as ill-smelling as the ordinary native house. The mines are straight shafts dug into the cliffs; in them rock is quarried and crushed by hand. At other places along the Yangtze and tributary streams we saw natives washing the sand and gravel for gold. They were able, even in this primitive way, to make a fairly good living, and it argues well for what this region would produce if modern mining methods could be introduced.

We left the Taku Ferry by way of a steep trail through an open pine and spruce forest along the rim of the Yangtze Gorge where the view was magnificent. No words can adequately describe the grandeur of this titanic chasm. In places the rocks were painted in delicate tints of blue and purple, in others the sides fell away in sheer drops of hundreds of feet to the green torrent below rushing onwards to the sea some two thousand five hundred miles away. While the rocks are not fantastically sculptured and the colors are softer than the Grand Canyon of Colorado, nevertheless its grandeur is hardly less imposing and awe-inspiring. If Yunnan is ever made accessible by railroads this gorge should become a Mecca for tourists, for it is without doubt one of the most remarkable sights of the world.

From the Yangtze River we traveled northwestward across an unmapped area toward Chungtien, a village well within the Tibetan sphere of influence, where Chinese influence is merely nominal. The region was one of vast mountain ridges, from 10,000 to 15,000 feet in height, heavily forested with pine and spruce, some trees being 150 feet in height. There are but few inhabitants, for the precipitous mountain sides offer little opportunity for agriculture and game is not abundant.

When we reached the Chungtien road we were on one of the great trade routes into Tibet, and over it caravans were continually passing laden with tea or pork. Many of them had traveled the entire length of Yunnan to Szemao, on the Tonking frontier, where a special kind of tea is grown, and were hurrying northward to cross the snow-covered passes which form the gateways to the "Forbidden Land."



THE PEAKS OF THE SNOW MOUNTAIN FROM THE YANGTZE

Tibetan Studies for the Artist

Every Tibetan is a study for an artist. He wears a fur cap, a long loose coat like a Russian blouse thrown carelessly off one shoulder and tied in about the waist, blue or red trousers, and high boots of felt or skin reaching almost to the knees. A long sword, its hilt inlaid with bright-colored bits of glass or stones, is half concealed beneath his coat, and he is seldom without a gun or a murderous-looking spear. In the breast of his loose coat, which serves for a pocket, he carries a remarkable assortment of articles: a pipe and tobacco, tea, *tsamba*, cooking pots, a snuffbox, and hanging down in front a metal charm to protect him from bullets and sickness.



THE SNOW MOUNTAIN AT LICHANG

The eastern Tibetans are men of splendid physique and great strength and are frequently more than six feet in height. They have brick red complexions, and many are really handsome in a full-blooded, masculine way. Their straight features suggest a strong mixture of other than Mongolian stock. They are the direct antithesis of the Chinese in every particular; their strength and virility and the dashing swing of their walk are refreshing to look upon after contact with the ease-loving Chinamen whom we generally saw carried along the road sprawling in mountain chairs.

Where the Yangtze Breaks Through Great Mountains

On September 5, after a heavy fall of snow, we left the Chungtien region for an eight-day trip to Weihsi, not far from the Mekong River. Although we looked forward with no pleasure to the long ride over the mountain passes which separated us from Weihsi, we expected to find new mammals in the Mekong valley. We followed down the river gorge at the upper end of which Chungtien is located and left the forests when we emerged on the main road. From the top of a 10,000-foot pass there was a magnificent view down the canyon to the snow-capped mountains, which were beautiful beyond description in their changing colors of purple and gold.

On the second day we saw before us seven snow-crowned peaks as sharp and regular as the teeth of a saw and reached the mouth of the stream where it spreads like a fan over a sandy delta and empties into the Yangtze. Here the mighty river, flowing proudly southward from its home on the wind-blown steppes of the "Forbidden Land," countless ages ago found the great Snow Mountain range barring its path. Thrust aside, it doubled back upon itself along the barrier's base, restlessly seeking a passage through the wall of rock. Far to the north it bit hungrily into the mountain's side again, broke through, and swung south, gathering strength and volume from hundreds of tributaries as it rushed onward to the sea.

For two days we rode along the river bank and crossed at the Shihku ferry. There was none of the difficulty here which we had experienced at Taku, for the river is wide and the current slow. It required only two hours to transport our entire caravan, while at the other ferry we had waited a day and a half. Strangely enough, while there are dozens of villages along the Yangtze and the valley is highly cultivated, we saw no sign of fishing. Moreover, we passed but three boats and five or six rafts, and it was evident that this great waterway, which for fifteen hundred miles from its mouth influences the trade of China profoundly, is here used but little by the natives.

After two and a half days' travel up the Yangtze we turned westward toward Weihsi and on December 11 had tiffin on the summit of a 12,000-foot pass in a beautiful snow-covered meadow, from which we could see the glistening peaks of the vast mountain range which forms the Mekong-Salween divide. In the afternoon we reached Weihsi, and camped in a grove of splendid pine trees on a hill overlooking the city. The place was rather disappointing after Lichiang. The shops were poor, and it was difficult to buy rice even though the entire valley was devoted to paddy fields, but we did get quantities of delicious persimmons.

Wu told us that seven different languages were spoken in the city, and we could well believe it, for we recognized Mosos, Lolos, Chinese, and Tibetans. This region is nearly the extreme western limit of the Moso tribe, which appears not to extend across the Mekong River.

The Gorge of the Mekong River

From Weihsi a stiff climb of a day a half over a thickly forested mountain ridge, frozen and snow-covered, brought us in sight of the green waters of the Mekong, which has carved a gorge for itself in an almost straight line from the bleak Tibetan plateaux to this part of Yunnan on its way southward through Indo-China to the sea.

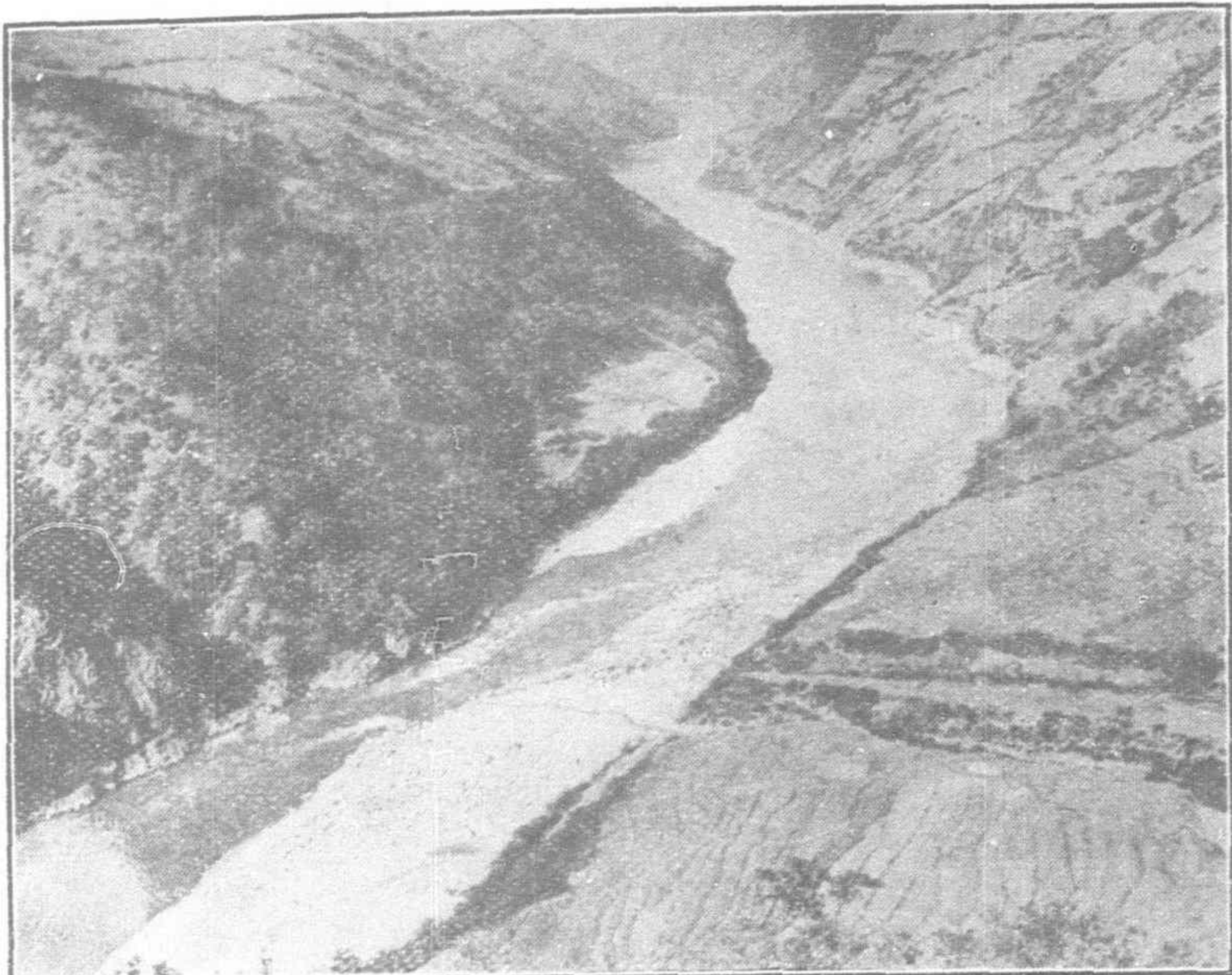
Our second camp was on the river at the mouth of a deep valley, near a small village. Wu said that the natives were Lutzus, and I am inclined to believe that he was right, although Major Davies on his map of Yunnan issued by the British War Office, indicates this region to be inhabited by Lisos. At any rate these people both in physical appearance and dress were quite distinct from the Lisos whom we met later. They were exceedingly pleasant and friendly, and the chief, accompanied by four venerable men, brought a present of rice. I gave him two tins of cigarettes, and the natives returned to the village wreathed in smiles. The garments of the Lutzus were characteris-



DUGOUT CANOES ON THE MEKONG

tic and quite unlike those of the Mosos, Lisos, or Tibetans. The women wore a long coat or jacket of blue cloth, trousers, and a very full pleated skirt. The men were dressed in plum-colored coats and trousers.

The Mekong on an average is not more than a hundred yards wide in this region, and, like the Yangtze, its water is very green



THE MEKONG RIVER. HILLSIDES CULTIVATED WITH CORN

from the Tibetan snows. The prevailing rock is red slate and sandstone, instead of limestone, as in the country to the eastward. The sides of the valley are so precipitous that it would seem impossible for a human being to walk over them, and yet they are patched with brown cornfields from the summit to the water. Considering the small area available for cultivation there are a considerable number of inhabitants; they have gathered into the villages and seldom live in isolated houses, as in the Yangtze valley.

Wherever a stream comes down from the mountain's side or can be diverted by irrigating ditches, the ground is beautifully terraced for rice paddies; but in other places, corn and peas appear to be the principal crops. Very few vegetables, such as turnips, squash, carrots, and potatoes, are raised; this is rather remarkable since they are so abundant in all the country between the Mekong and the Yangtze Rivers.

Bridges of Bamboo Rope

In several places the water was spanned by rope bridges. The cables are made of twisted bamboo; and, since one end is necessarily higher than the other, there are always two ropes—one to cross each way. The traveler is tied by leather thongs in a sitting position to a wooden "runner" which slides along the bamboo cable and shoots him across the river at tremendous speed. Mules and merchandise are transported in a similar way.

The valley is hopeless from a zoölogical standpoint. It is too dry for small mammals, and the mountain slopes are so precipitous, so thinly forested, and so generally undesirable that, except for gorals, no other large game would live there. The bird life is decidedly uninteresting. There are no cranes or shelldrakes, and except for a few flocks of mallards which feed on the rice fields we saw no other ducks or geese.

On December 20 we turned away from the Mekong valley and began to march southeast by east across an unmapped region in the direction of Talifu. Five days later we reached a very dirty Chinese town in a deep valley near some extensive salt wells. Red clay dust lay thickly over everything, and the filth of the streets and houses was indescribable. When we left on the following day we passed dozens of caravans and groups of men and women carrying great disks of salt. In Yunnan salt is supplied from three regions. The water from the wells is boiled in great caldrons for several days, and the resulting deposit is earth, impregnated with salt. This is crushed, mixed with water, and boiled again until only pure salt remains.

Collection of 1,300 Mammals

On January 5 we again reached Talifu. Our work in the north had brought us a collection of 1,300 mammals as well as

several hundred birds, much material for habitat groups, and a splendid series of photographic records in Paget color plates, black and white negatives, and motion-picture film; but what was of first importance, we had covered an enormous extent of diverse country and learned much about the distribution of the fauna of northern Yunnan. The 1,300 mammals of our collection were taken in a more or less continuous line across six tremendous mountain ranges and furnish an illuminating cross-section of the entire region from Talifu north to Chungtien and west to the Mekong River. It is apparent that in this portion of the province even the smallest mammals are widely spread and that the principal factor in determining distribution is the flora. Neither the highest mountain ridges nor such deep, swift rivers as the Yangtze and the Mekong appear to act as effective barriers to migration, and as long as the vegetation remains constant the fauna changes but little.

From Talifu to Tengyueh

On January 13, 1917, we left Talifu with a caravan of thirty mules for Yungchang, eight days' travel to the south.

On the way to Yungchang we crossed a succession of dry, thinly forested mountains from 7,000 to 8,000 feet high which near their summits were often clothed with a thick growth of rhododendron trees. The beautiful flowers flashed like fire balls among the green leaves, peach trees were in full blossom, and in some spots the dry hills seemed about to break forth in the full glory of their spring verdure. We crossed the Mekong, near a village called Shuichai, on a picturesque chain suspension bridge of a type which is not unusual in the southern and western part of the province. Several heavy iron chains are firmly fastened to huge rock piers on opposite sides of the river and the roadway is formed by planks laid upon them. Although the bridge shakes and swings in a rather alarming manner when a caravan is crossing, it is perfectly safe if not too heavily loaded.

Footbinding, Caves and Bats at Yungchang

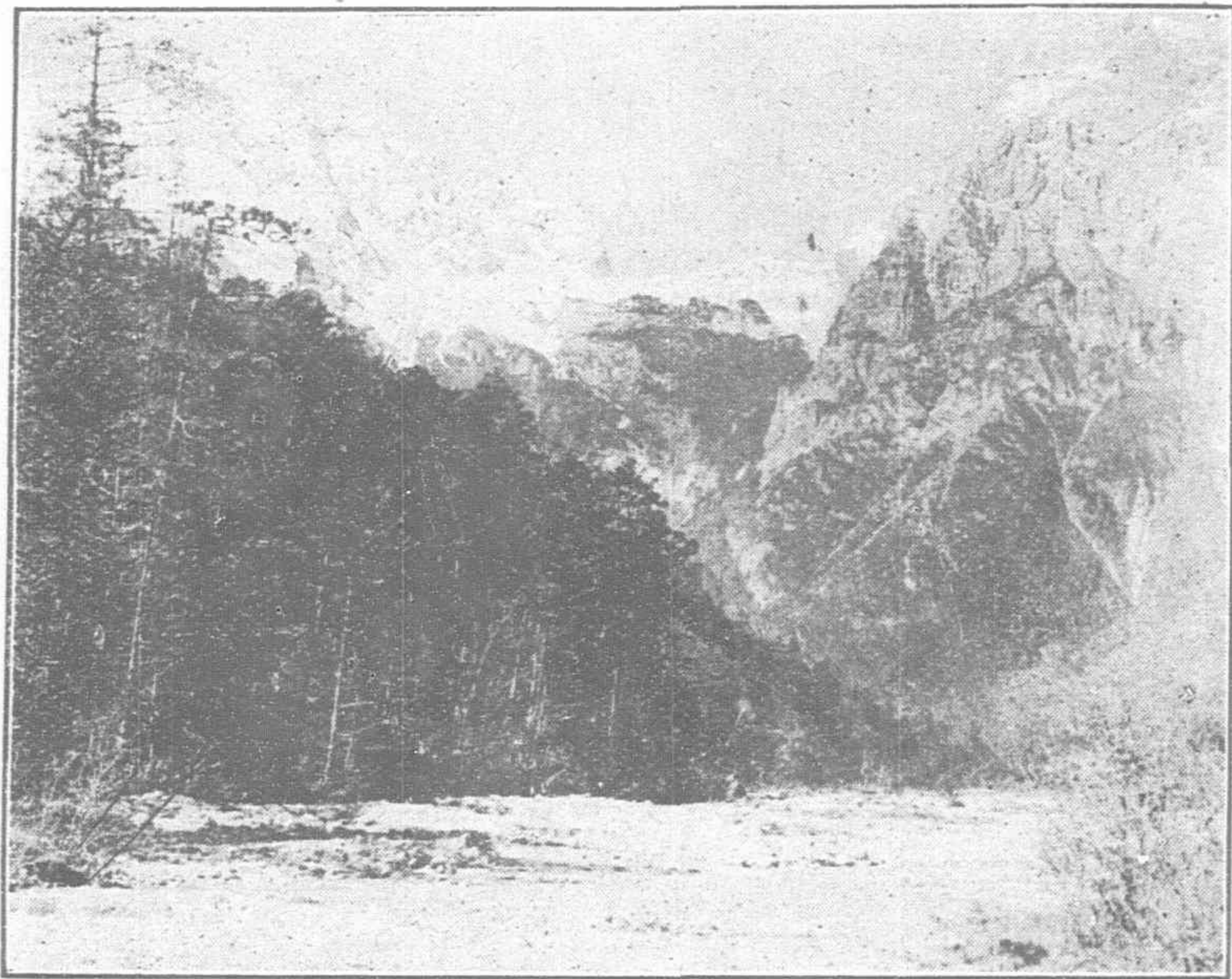
In the afternoon of January 21 we rode down the mountain to the great Yungchang plain, and for two hours trotted over a hard dirt road. The plain is 18 miles long by 6 miles wide and except for its scattered villages is almost entirely devoted to paddy fields. The city itself includes about five thousand houses. It is exceedingly picturesque and is remarkable for its long, straight, and fairly clean streets, which contrast strongly with those of the usual Chinese town. At the west, but still within the city walls, is a picturesque wooded hill occupied by temples.

Yungchang was visited by Marco Polo in the 13th century and he refers to it as "Vochang." He tells of a great battle which



A STREET IN TENGYUEH

Nestardin, one of Kublai Khan's generals, fought with the King of Burma in this vicinity; a battle in which elephants were used against the Tartars for the first time.



WHITE WATER NEAR TAKU FERRY

Yungchang appears to be almost entirely inhabited by Chinese, and in no part of the province did we see footbinding more in evidence. Practically every woman and girl, regardless of her station in life, was crippled in this brutal way. The women wear long full coats with flaring skirts which hang straight from the shoulders to their knees. When the trousers are tightly wrapped about their shrunken ankles, they look in a side view exactly like huge umbrellas.

One day we visited a cave thirty *li* north of the city where we hoped to find new bats. A beautiful little temple has been built over the entrance to the cavern, which does not extend more than forty or fifty feet into the rock. But twenty *li* south of Yungchang, just beyond the village of Ashihwo, there is an enormous cave which is reported to extend entirely through the hill. Whether or not this is true we cannot say, for although we explored it in part we did not reach the end. The central corridor is about thirty feet wide and at least sixty or seventy high. We followed the main gallery for a long distance and turned back at a branch which led off at a sharp angle. We were not equipped with sufficient candles to pursue the exploration more extensively and did not have time to visit it again. The cave contained some beautiful stalactites of considerable size, but the limestone was of a dull lead color. We found only one bat. These animals appear not to have used it extensively as there was little evidence upon the floor.

At Yungchang we saw water buffaloes for the first time in Yunnan, but farther to the south and west we found them to be in universal use in the rice fields, while Chinese cows are used as burden bearers in this part of the province. Such caravans travel much more slowly than do mule trains, although the animals are not loaded as heavily. Two or three of the leading cows usually carry upon their backs large bells hung in wooden framework, and the sound is by no means unmusical when heard at a distance.

Into the Sub-tropics at Shihtien

From Yungchang we traveled southward for two days over bare brown mountain sides, their monotony unrelieved except by groves of planted pine and fir trees, and then descended abruptly into the great subtropical valley at Shihtien. Mile after mile this fertile plain stretches away in a succession of rice paddies and fields of sugar cane, interspersed with patches of graceful bamboo, their summits drooping like enormous clusters of ostrich plumes; the air is warm and fragrant, and the change from the surrounding hills is delightful. However, we were disappointed in the

shooting, for, although it appeared to be an ideal place for ducks and other water birds, we killed only five teal, and the great ponds were almost devoid of bird life. Even herons, so abundant in the north, were conspicuous by their absence; and we saw no sheldrakes, geese, or mallards.

From Midwinter to Summer in Two Hours

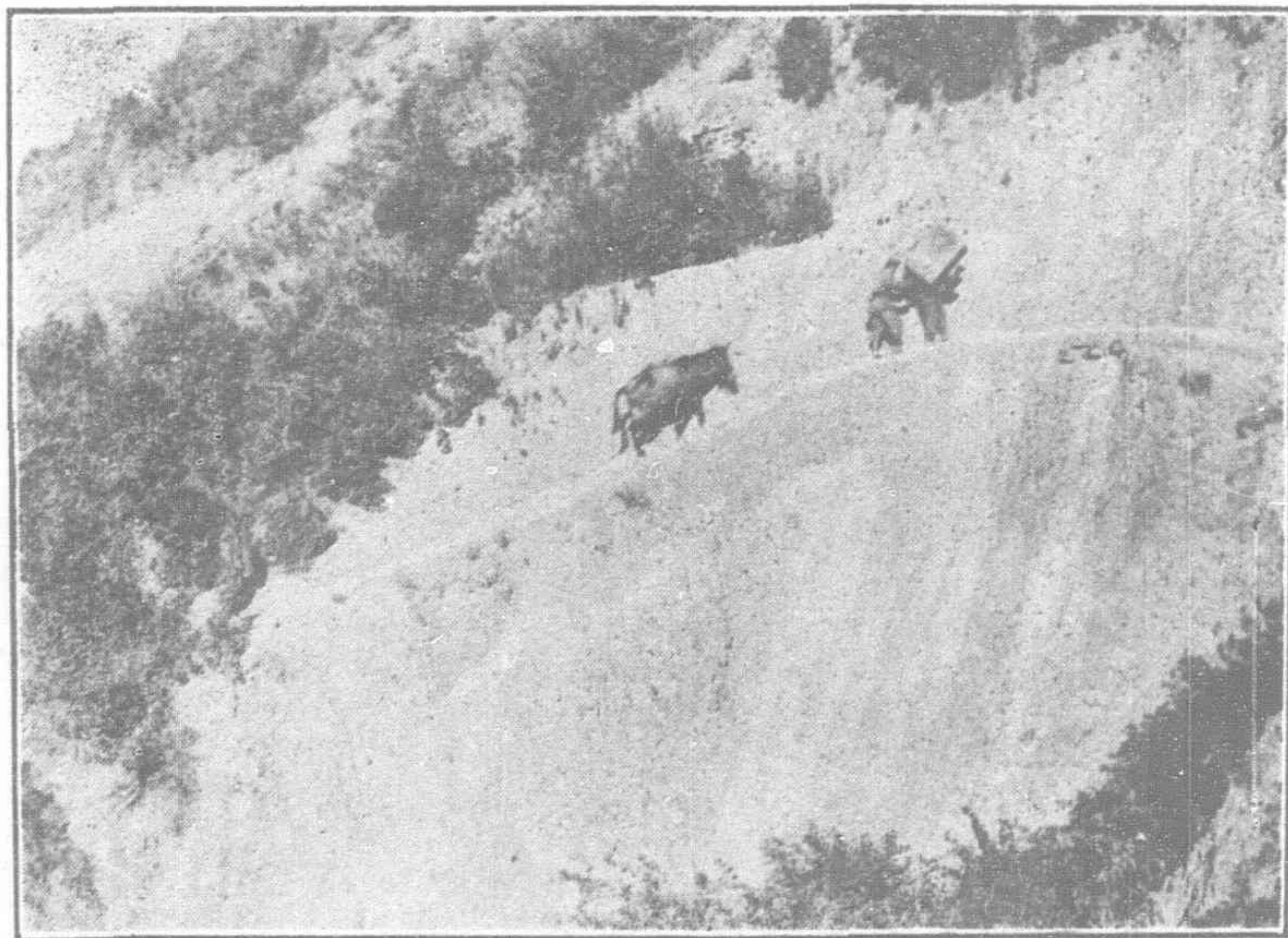
On the second day from Shihtien we climbed a high mountain and wound down a sharp descent for about 4,000 feet into a valley only 2,300 feet above sea level. We had been cold all day on the ridges, exposed to a biting wind, and had bundled ourselves into sweaters and coats over flannel shirts. After going down about a thousand feet we tied our coats to the saddle pockets; on the second thousand we stripped off the sweaters; and for the remainder of the descent rode with sleeves rolled up and shirts open at the throat. We had come from mid-winter into summer in two hours, and the change was most startling. It was as though we had suddenly ridden into an artificially heated building like the rooms for tropical plants at botanical gardens.

Our camp was on a flat plain just above the river. Here we had a splendid view of the wide valley, which was like the bottom of a well, with high mountains rising abruptly on all sides. It was a place of strange contrasts. The bushes and trees were in full green foliage, but the grass and paddy fields were dry and brown as in mid-winter. The thick trees at the base of the hills were literally alive with doves, but there were few mammal runways and our traps yielded no results. That night a muntjac, the first we had heard, barked hoarsely behind the tents.

In the morning the entire valley was filled with a dense white fog; but we climbed out of it almost immediately and by noon were back in winter again on the summits of the ridges. The country through which we passed *en route* to Chênkang was similar to that which had oppressed us during the preceding week—cultivated valleys between high barren mountains relieved here and there by scattered groves of planted fir trees. It was a region utterly hopeless from a naturalist's standpoint, and when we arrived at a large town near Chênkang we were well-nigh discouraged.

200 Specimens Collected

With gloom in our hearts which matched that of the weather, we left in a pouring rain on February 5, to slip and splash southward through veritable rivers of mud toward a village called Mêngting, where it was said there was good hunting. In the afternoon of the second day the country suddenly changed. The trail led through a wide grassy valley, bordered by heavily forested hills, into a deep ravine. Along the banks of a clear stream the earth was soft and damp, and the moss-covered logs and dense vegetation made ideal conditions for small mammalian life.



DIFFICULT GOING IN THE MEKONG VALLEY

We rode happily up the ravine and stood in a rocky gateway. At the right a tree-clothed mountain rose out of a tangle of luxuriant vegetation; to the left wave after wave of magnificent forested ridges lost themselves in the low-hung clouds; at our feet lay a beautiful valley filled with stately trees which spread into a thick green canopy overhead.



ONE OF THE GATES OF CHOUCHOU, BETWEEN TALIFU AND YUNNANFU

We camped in a clearing just at the edge of the forest. While the tents were being pitched I set a line of traps along the base of the opposite mountain and found a runway under almost every log. About eight o'clock I ran my traps and, with the aid of a lantern, stumbled about in the bushes and high grass, over logs and into holes. When I emptied my pockets there were fifteen mice, rats, shrews, and voles representing seven species *and all new to our collection*. Heller brought in eight specimens and added two new species. We forthwith decided to stay right where we were until this "gold mine" had been exhausted.

During the eight days in which we remained at this camp two hundred specimens, comprising twenty-one species, were added to our collection. Although the altitude was still 5,000 feet, the flora was quite unlike that of any region in which we had previously collected, and that undoubtedly accounted for the difference of fauna. We were on the very edge of the tropical belt which stretches along the Tonking and Burma frontiers in the extreme south and west of the province.

Travel Through Walls of Tangled Vegetation.

It was already mid-February and if we were to work in the fever-stricken valleys below 2,000 feet, it was high time we were on the way southward. The information which we had obtained near Chenkang had been supplemented by the natives of Mucheng, and we decided to go to Mengting as soon as possible.

The first march was long and uneventful, but, from the summit of a high ridge, we could see a wide valley, which we reached in the early morning of the second day. The narrow mountain trail abruptly left us on a jutting promontory and wandered uncertainly down a steep ravine to lose itself in a veritable forest of tree ferns and sword grass. The slanting rays of the sun drew long golden paths into the mysterious depths of the mist-filled valley. To the right a giant sentinel peak of granite rose gaunt and naked from out the enveloping sea of green which swelled away to the left in huge ascending billows.

We rested in our saddles until the faint tinkle of the bell on the leading mule announced the approach of the caravan, and then picked our way slowly down the steep trail between walls of tangled vegetation. In an hour we were breathing the moist, warm air of the tropics and riding across a wide valley as level as a floor. The long stretches of rank grass, far higher than our

heads, were broken by groves of feathery bamboos, banana palms, and splendid trees interlaced with thorny vines.

Near the base of the mountain a village nestled into the grass. The bamboo houses, sheltered by trees and bushes, were roofed with thatch in the shape of an overturned boat, and the single street was wide and clean. Could this really be China? Verily, it was a different China from what we had known before. It might be Burma, India, Java, but never China!

It was the first Shan village we had ever seen, and regretfully we rode away across the plain between the walls of waving grass toward the Namting River. Two canoes, each dug out of a single log and tightly bound together, formed the ferry, but the packs were soon across the muddy stream, and the mules were made to swim to the other bank. Shortly after leaving the ferry we emerged from the vast stretches of rank grass on to the open rice paddies which stretched away in a gently undulating plain from the river to the mountains.

The Shan Village of Mengting

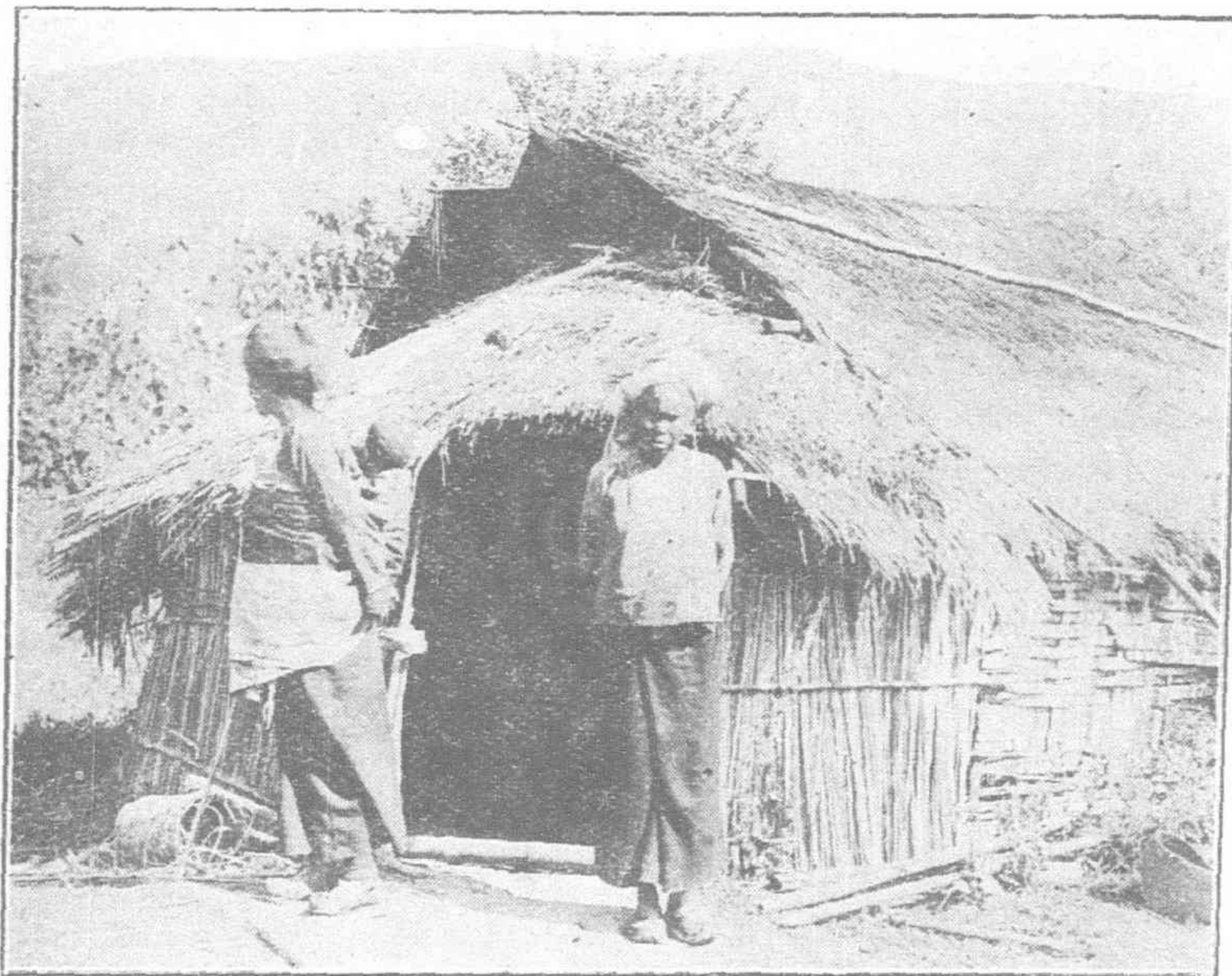
Away in the distance we saw a wooded knoll, with a few wisps of smoke curling above its summit, but not until we were well-nigh there did we realize that its beautiful trees sheltered the thatched roofs of Mengting. But this was only the "residential section" of the village, and below the knoll on the opposite side of a shallow stream lay the shops and market.

The day following our arrival in Mengting the weekly market was held, and, when Wu and I crossed the little stream to the business part of the village, we found ourselves in the midst of the most picturesque crowd of natives it has ever been my fortune to see. It was a group flashing with color, and every individual was a study for an artist. There were blue-clad Chinese, Shans with tattooed legs and turbans pink or white; Burmans dressed in brilliant purple or green; Las, yellow-skinned Lisos, flat-faced Palungs, Was, and Kachins in black and red strung about with beads or shells. Long swords hung from the shoulders of those who did not carry a spear or gun, and hilts of wicked-looking daggers peeped from beneath their sashes. Every man carried a weapon ready for instant use.

Nine tribes were present in the market that day and almost as many languages were being spoken. Amid the babel of sounds half the trading had to be done by signs. The narrow street was choked with goods of every kind spread out upon the ground: fruit, rice, cloth, nails, knives, swords, hats, sandals, skins, horns, baskets, mats, cross-bows, arrows, pottery, tea, opium, and scores of other articles for food or household use. Dozens of natives were arriving and departing, bringing new goods or packing up their purchases; under open, thatched pavilions were silent groups of men gambling with cash or silver; and in the tea houses white-faced natives lay stretched upon the couches



GROUP OF LOLO NATIVES. THESE MEN HAD NEVER BEFORE SEEN A WHITE MAN



SHAN MAN AND WOMAN; NAMTING RIVER REGION

rolling pills of opium and oblivious to the constant stream of passers-by. It was a picturesque, ever changing group, a kaleidoscopic mass of life and color, where Chinese from civilized Canton drank and gambled and smoked with wild natives from the hills or from the depths of the jungle.

The permanent population of Mengting is entirely Shan, but during the winter a good many Cantonese Chinamen come to gamble and buy opium. The drug is smuggled across the border very easily, and a lucrative trade is carried on. It can be purchased for seventy-five cents (Mexican) an ounce in Burma and sold for two dollars (Mexican) an ounce in Yunnanfu and for ten dollars in Shanghai.

In the Jungle of the Mengting Valley

Every morning the valley at Mengting was filled with a thick, white mist, and when we broke camp at daylight on our way to a hunting place a few miles down the river, every mule was swallowed up in the fog as soon as it left the rice field. We followed the sound of the leader's bell, but not until ten o'clock was the entire caravan visible. For thirty *li* the valley is broad and flat as at Mengting and filled with a luxuriant growth of rank grass, but it narrows suddenly where the river has carved its way through a range of hills.

The trail led uncertainly along a steep bank through a dense, tropical jungle. Palms and huge ferns, broad-leaved bananas, and giant trees, laced and interlaced with thorny vines and hanging creepers, formed a living wall of green as impenetrable as though it were a net of steel. We followed the trail all day, sometimes picking our way among the rocks high above the river or padding along in the damp earth almost at the water's edge. At night we camped in a little clearing where some adventurous native had fought the jungle and been defeated; his bamboo hut was in ruins, and the fields were overgrown with a tangle of throttling vegetation.

We had seen no mammals, but the birds along the road were fascinating. Brilliant green parrots screamed in the tree tops; and tiny sunbirds, dressed in garments of red and gold and purple, flashed across the trail like living jewels. Once we heard a strange whir and saw a huge hornbill flapping heavily across the river, every beat of his stiff wing feathers sounding like the motor of an airplane. Bamboo partridges called from the bushes, and dozens of unfamiliar bird notes filled the air.

Shortly after eleven o'clock on the following morning we camped beneath two enormous trees, like great umbrellas, spreading cool, dark shade above a sparkling stream on the edge of an abandoned rice field. From a patch of ground as level as a floor, where our tents were pitched, we could look across the brown rice dykes to the enclosing walls of a jungle and up to the green mountain beyond. A half mile farther down

the trail, but hidden away in the jungle, lay a picturesque Shan village of a dozen huts called Namhu, where the guide said we should be able to find hunters.

On the Burma Frontier

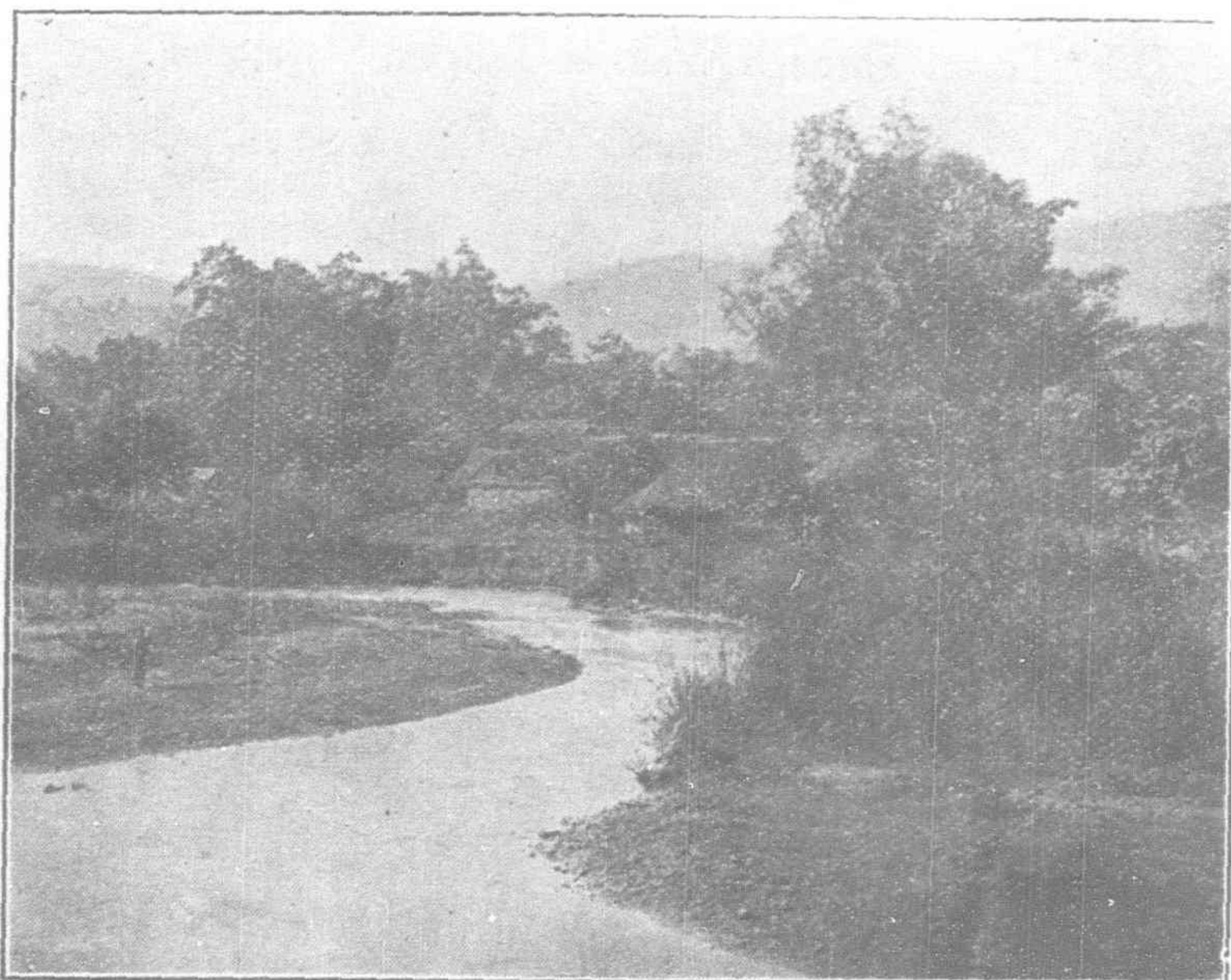
The camp at Namhu was a supremely happy one, and we left on March 7 with much regret. Its resources seemed to be almost exhausted, and one of our hunters assured us that at a village called Maliling we should find excellent shooting. We asked him the distance and he replied, "About a long bmaboo joint away." It required three days to get there!

With a Shan guide we traveled due north along a good trail which led through dense jungle where there was not a clearing or a sign of life. In the afternoon we noted that the trail bore strongly to the west and ascended rapidly. Soon we had left the jungle and emerged into an absolutely treeless valley between high barren hills. We knew that the Burma frontier could not be far away, and in a few moments we passed a large square boundary stone; a hundred yards on the other side the hills were covered with bright green stalks, and here and there a field glistened with white poppy blossoms. The guide insisted that we were on the direct road to Maliling, which he now said for the first time was in Burma. On our map it was marked well over the border in Chinese territory, and were greatly puzzled.

About six o'clock the brown huts of a village were silhouetted against the sky on a tiny knoll in the midst of a grove of beautiful trees, and we camped at the edge of a water hole. The pool was almost liquid mud, but we were told that it was the only water supply of the village and its cattle. As though to prove the statement a dozen buffaloes ambled slowly down the hill, and stood half submerged in the brown liquid, placidly chewing their cuds; meanwhile blue-clad Shan women with buckets in their hands were constantly arriving at the pond for their evening supply of water. We had no filter, and it was nauseating to think of drinking the filthy liquid. There was no alternative, however, and after repeated boiling and several strainings we settled it with alum and disguised its taste with tea and soup.

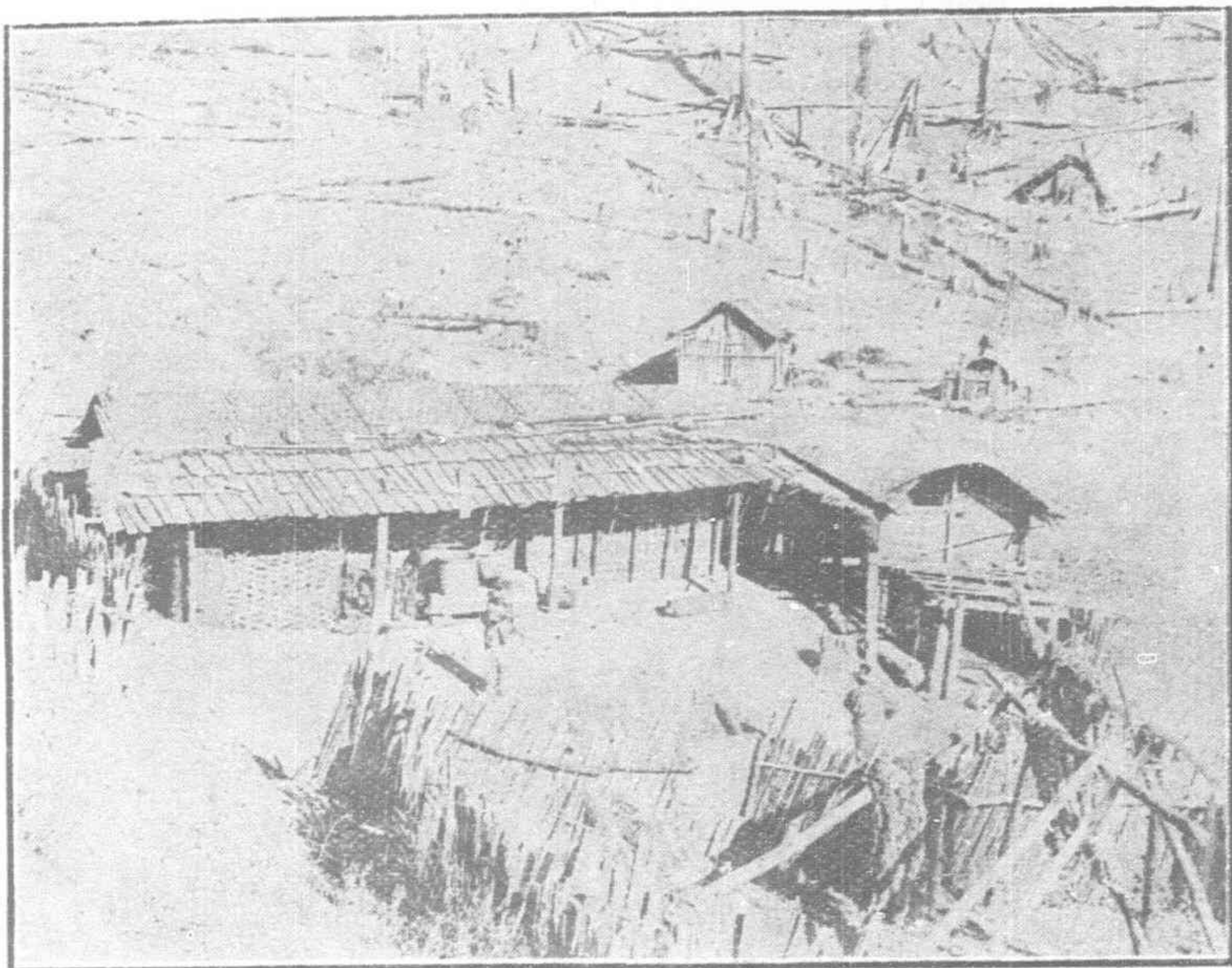
After dinner we questioned the few natives who spoke Chinese, but we became only more and more confused. They knew of no such place as Maliling, and our Shan guide had discreetly disappeared. But they were familiar with the trail to Malipa, a village farther west in Burma, and, moreover, they said that two hundred foreign soldiers were stationed there. We were quite certain that they must be native Indian troops but thought that a white officer might perhaps be in command.

We reached Malipa about one o'clock in the afternoon and found it to be a straggling village built on two sides of a deep ravine and having a mixed population of Shans, Chinese, and a few Burmans. It happened to be the weekly market day and the bazaar was crowded. A number of Indian soldiers in khaki



VILLAGE OF MENGTING FROM THE BURMA FRONTIER

were standing about, and my wife called out to me, "I wonder if any of them speak English." Instantly a little fellow approached, with cap in hand, and said, "Yes, Madam, I speak English."



A LOLO VILLAGE

One cannot imagine how strange it seemed to hear our own language from a native in this out-of-the-way spot! He was the compounder, or medical assistant, and told us that the hundred native troops were in charge of a white officer whose house was on the opposite side of the river gorge. He guided us to a temple, and, while the mules were being unloaded, in walked a tall, handsome young British officer, who introduced himself as Captain Clive. He was almost speechless with surprise at seeing my wife, for he had not spoken a sentence in English or seen a white person since his arrival at this lonely post five months before. We remained with Captain Clive for five days and after a most delightful visit traveled almost due north to the Salween River.

The Great Walls of the Salween River

The country through which we passed was a succession of dry treeless hills, brown and barren and devoid of animal life. On the evening of the third day we reached the Salween at a ferry a few miles from the village of Changlung, where the river begins its great bend to the westward and sweeps across the border from China into Burma.

The river has cut a tremendous gorge for itself through the mountains, and the sides are so precipitous that the trail doubles back upon itself a dozen times before it reaches the river 3,500 feet below. The upper half of the gorge is bare or thinly patched with trees; but in the lower part the grass is long and rank, and a thin dry jungle straggles along the water's edge. The river at this point is about two hundred yards wide, but narrows to half that distance below the ferry and flows in a series of rapids between rocky shores.

The valley is devoid of human life except for three boatmen who tend the ferry, but the deserted rice fields along a narrow shelf showed evidence of former cultivation. On the slopes far up the side of the canyon is a Miao village, a tribe which we had not seen before. Probably the valley is too unhealthy for any natives to live close to the water's edge; even at the time of our visit in early March the heated air was laden with malaria.

The valley was too dry to be a very productive trapping ground for either small or large mammals; but the birds were interesting, and we secured a good many species new to our collection. Jungle fowl were abundant and pigeons exceedingly so, but we saw no ducks along the river and only two cormorants.

Very few natives crossed at the ferry during our stay, for it is a long way from the main road, and the climb out of the gorge is too formidable to be undertaken if the Salween can possibly be crossed higher up where the valley is wide and shallow

While we were camped at the river the heat was most uncomfortable during the middle of the day and was but little mitigated by the wind which blew continually. During mid-summer the valley at this point must be a veritable furnace and doubtless reeks with fever. We slept under nets at night, and in the early evening while we were watching for peacocks the mosquitoes were very troublesome.

Dry and Bare Hills to Lungling

It is a long hard climb out of the Salween valley. We left on March 24 and all day crawled up the steep sides on a trail which doubled back and forth upon itself like an endless letter S. From our camp at night the river was just visible as a thin green line several thousand feet below, and, for the first time in days, we needed a charcoal fire in our tents.

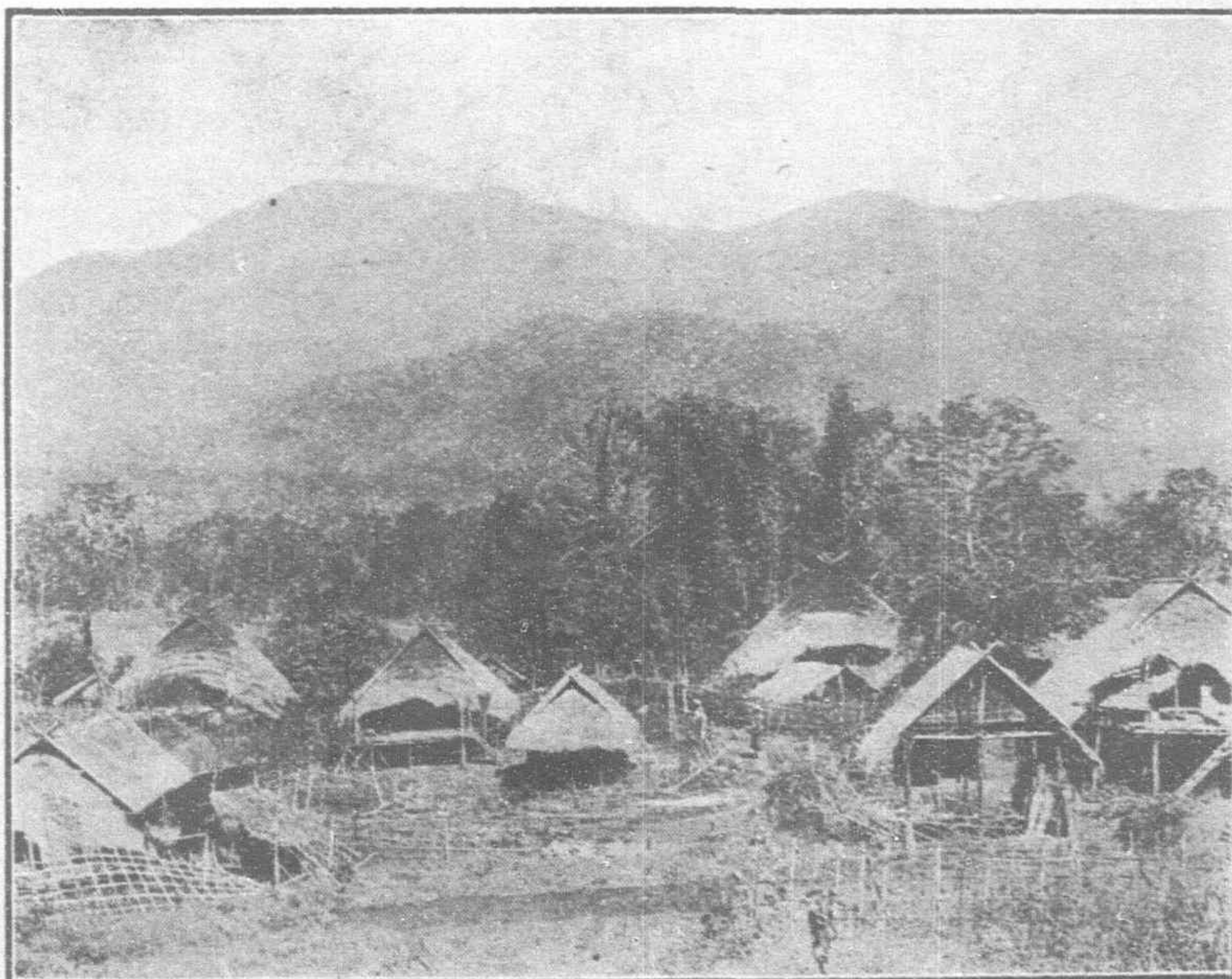
We were *en route* to Lungling, a town of considerable size where there was a possibility that mail might be awaiting us in care of the mandarin. Although ordinarily a three days' journey, it was more than four days before we arrived, because I had a sharp attack of malaria shortly after leaving the Salween River and we had to travel half stages.

When we were well out of the valley and at an altitude of 5,000 feet, we arrived at a Chinese town. Its dark ill-smelling houses jammed together in a crowded mass, and the filthy streets, swarming with ragged children and foot-bound women, were in unpleasant contrast to the charming little Shan villages which we had seen in the low country. The inhabitants themselves appeared to no better advantage when compared with their Shan neighbors, for their stares and insolent curiosity were almost unbearable.

The region between the Salween River at Changlung and Lungling is as uninteresting to the zoologist as it could possibly be, for the hills are dry and bare and devoid of animal life. Lungling is a typical Chinese town except that the streets are wide and it is not as dirty as usual.

Tengyueh, the Gateway from Burma

It is only three days travel from Tengyueh and, after two weeks of hunting in a heavily forested mountain pass 8,000 feet high, we decided to go into the city. Tengyueh is one of the most important places in the province, for it stands as the door to India. All the trade between Burma and Yunnan flows back and forth through the gates of Tengyueh, over the great caravan road to Bhamo on the upper Irrawady River. A station of the Chinese Foreign Customs is situated at Tengyueh, and four white men are employed in its administration; there is also a British consul and a resident missionary, so that when we arrived we seemed to have suddenly dropped into civilization. For a month we hunted



SHAN VILLAGE OF NAMKA ON THE BURMA FRONTIER

very successfully in the vicinity of Tengyueh and returned there on May 24, ending the active field work of the expedition just a year after it had begun.

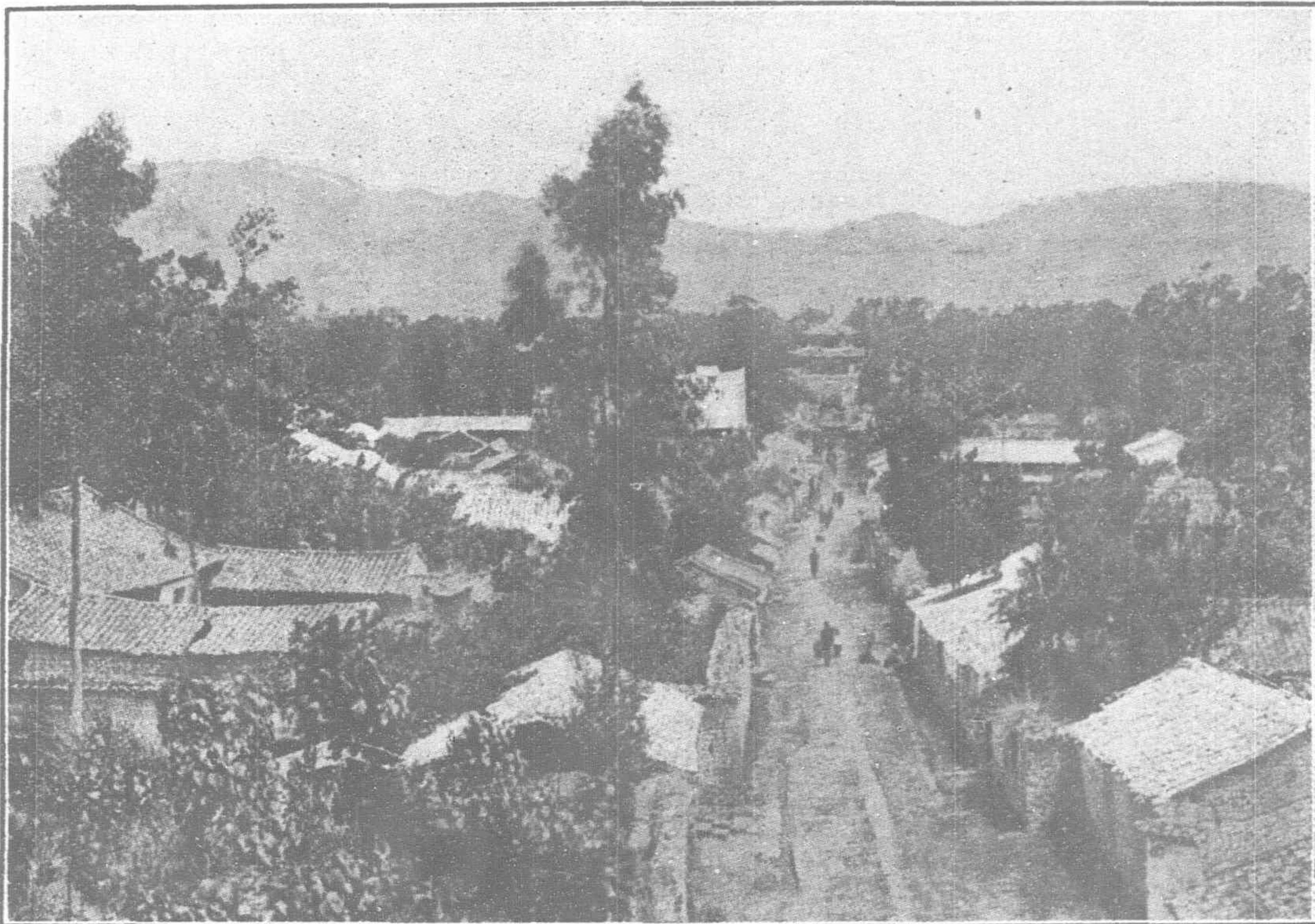
It was of paramount importance to pack our specimens before the beginning of the summer rains. They might be expected to break in full violence any day after June 1; after they had really begun it would be impossible to get our boxes to Bhamo, for virtually all caravan travel ceases during the wet season.

Our days in Tengyueh were busy ones, for after the specimens were packed and the boxes sealed it was necessary to wrap them in waterproof covers; moreover, the equipment had to be sorted and sold or discarded, a caravan engaged, and nearly a thousand feet of motion-picture film developed.

Results of the Expedition

The entire collections of the expedition were packed in forty-one cases and included 2,100 mammals, 800 birds, 200 reptiles and batrachians, 200 skeletons and formalin preparations for anatomical study, 150 *Paget* natural color plates, and 10,000 feet of motion-picture film.

Since the expedition was organized primarily for the study of the mammalian fauna and its distribution, our efforts were directed very largely toward this branch of science, and other things were gathered only when conditions were especially favorable. Our tents were pitched in 108 different spots from



A STREET IN TENGYUEH

15,000 feet to 1,400 feet above sea level; because of this range in altitudes, the fauna represented by our specimens is remarkably varied.

Fortunately all the cases arrived in New York in safety, but even at this time it is impossible to say exactly what there is in our collection, for it is still being prepared for study; it is certain, however, to contain many species new to science.

Recent Progress in the Chinese Administration of Justice

Some Notable Advances towards thorough Reform of Court Procedure

By W. K. LO, of the Law Codification Commission, Peking

Much has been written about the iniquities of Chinese pre-reform administration, but the fact that China's ancient legal conceptions, though not comparable to the scientific statements of the finely balanced codes of the present day, were yet admirably adapted to the preservation of her organized society and superior to those which existed elsewhere, is too often overlooked. Sir G. T. Staunton, who translated the old Chinese code, said that the most remarkable thing about it was "its great reasonableness, clearness, and consistency; the business-like brevity and directness of the various provisions, and the plainness and moderation in which they are expressed." In a word, China had a glorious beginning, and then a long stationary period much longer than that of any other land, so that when the Treaty of Nanking was signed between Great Britain and China in 1842, Great Britain found a state of things in China inferior to those which then existed in her own country. China was behind the times and did not know it. The severest penalties were exacted for infractions of the law; torture was common; prisons were unhealthy and insanitary; there was no

independent judiciary, and no definite procedure. But since that time public opinion has traveled a long way, especially during the last decade, and the significance of the changes which have recently taken place can be appreciated only as the soundness of their basis is understood.

China having entirely broken with the inertness of her Darker Ages is endeavoring to harmonize her institutions with the latest developments in other countries. She has not only made a thorough revision of her laws but has completely remodelled her courts. It is to this reform that I particularly address myself.

The Provisional Criminal Code now in force was drawn up in the closing year of the Tsing dynasty, and proclaimed on March 10th, 1912, the first year of the Republic. It introduced radical changes, and left far behind the former stage of intimidation and expiation—a period in legal science which existed in Europe also during the Middle Ages and the Renaissance. The code was framed after the Continental system, and was divided into two parts, General and Particular. It abolished

all brutal punishments in favor of simple deprivation of liberty by imprisonment, or deprivation of property by fine, and introduced carefully revised provisions for extenuating circumstances, and more exact rules for the punishment of accessories, concurrence of offences, and recidive so as to bring them into accord with modern ideas. The code also adopts the most modern legislation in regard to conditional release and postponement of punishments. There are special provisions for the treatment of youthful offenders and insane persons. Only actions harmful to society are punished. As regards the power of inflicting penalties, the arbitrary use of power by the court is guarded against by fixing a maximum and minimum sentence for each case.

Notwithstanding the many important advances on the old system this code was found to be still capable of improvement, and a second draft is now being prepared. This revised draft will conserve such results of the most recent legislation of the last decade set forth in the latest criminal codes and drafts of Europe as are applicable to our peculiar conditions. Its tendency will be to make a further and more scientific application of the principle that punishment should fit the individual, not the crime. For instance, to give a few examples out of many which might be quoted, new provisions have been introduced which reduce the criminal responsibility of the feeble-minded; no one is punished for the consequences of his acts unless it is proven that he could have foreseen such consequences; it is also provided that the judge shall consider the circumstances, character, temperament, intelligence and economic conditions of a criminal when determining a penalty. The first half of this revised code was published last year*, the second half will be printed early in the present year.

In regard to Civil Law, and Commercial Law, we have not yet a revised code, and therefore, the decisions of the courts now derive their sources from:—

(a) Written Law:—

- (1) Those parts relating to the Civil Law in the old code;
- (2) The special laws enforced since the Republic;
 - (a) The Mining Ordinance.
 - (b) The Copyright Ordinance.
 - (c) The Commercial Association Ordinance.
 - (d) The Traders Ordinance.
 - (e) and various laws relating to properties.

(b) Unwritten Law.

According to a decision handed down by the Court of Cassation in the second year of the Republic, judgments in civil actions must be guided by the express provisions of the law; if there are no such provisions then by custom; and if there is no available custom then by jurisprudence. In another decision given in the same year, it was emphasized that only custom which has the four following conditions is to have effect: (a) the custom must be universally *bonâ fide* believed to have the force of law; (b) at the same period and in the same affair, the rights and duties must be the same; (c) it must not have been provided for by any law or ordinance; (d) it must not be contrary to public order and *bonos mores*.

A draft of the Civil Code was also drawn up at the end of the Tsing dynasty. Following the German Civil Code, which the late Professor Maitland has described as "the most carefully considered statement of a nation's laws that the world has ever seen," it is divided into five parts. Part I deals with General Rules; Part II deals with Obligations; Part III deals with Things; Part IV deals with Family; Part V deals with Succession. The first two parts have been made after a close study of the German Civil Code and the Swiss Civil draft, the three remaining parts derive their sources mostly from continental modern jurisprudence, but also partly from our own old laws, precedents, and customs. A draft Commercial Code was commenced at the same time, but this, I regret to say, it still unfinished. These two drafts were hastily drawn. The whole work was completed within two or three years, but it must be borne in mind that in civil and commercial law it is essential that customs and traditions are preserved, and that any new principles introduced approximate to existing conditions. Careful investigations are now being made by the Law Codification

Commission on these points, and until they are completed it would be inadvisable to promulgate the drafts.

We now come to our adjective laws. The laws in force are very rudimentary. They are as follows:—

(I) Written Laws:—

- (a) The law of Organization of the Judiciary.
- (b) Provisional Regulations of the High Courts and their Subordinate Courts.
(These two were enforced at the end of the Tsing dynasty, and since the Republic.)
- (c) Regulations Governing the Administration of Judicial Affairs by Magistrates.
- (d) Provisional Regulations Relating to Procedure in Magistrate Courts.
- (e) The parts relating to jurisdiction in the Civil Draft.
- (f) Rules of Application of Summary Procedure.
- (g) Rules Relating to Actions for Damages.

Besides the laws for procedure we have various regulations relating to execution and registration.

(II) Unwritten Law.—It has been decided that the principles of jurisprudence laid down in the drafts on civil and criminal procedure can be referred to as guidance, if such have not yet been provided by the laws in force. These drafts were also drawn up towards the close of the late dynasty. They were a selection from such laws of the continental system as are suitable to our circumstances.

The laws in force, though comparatively scarce, embody the fundamentals of legal science. It is, for example, expressly provided in the Provisional Regulations for the High Courts and their Subordinate Courts that

- (1) A judge must withdraw from a trial if there appear to be any reasonable grounds for fearing that injustice may be done.
- (2) Arrest warrants and search warrants can be issued in limited circumstances.
- (3) There shall be no unnecessary detention, and provisions allowing bail have been specified.
- (4) Trials must be in open court.
- (5) There shall be freedom of appeal on reasonable grounds of justice.
- (6) Parties must be heard and given a fair trial before judgment.

In the chapter on Malfeasance in Office in the Provisional Criminal Code it is further provided

- (1) That any act of violence or cruelty by any official, against any person concerned in any case before the courts, shall be punished by imprisonment.
- (2) That failure on the part of any procurator or other official to render proper protection shall be indictable.

The drafts for civil and criminal procedure are much more elaborate since they embody the main principles of European codes, but are not yet enforced, as it is deemed better not to promulgate them until after a careful revision. This will soon be made. The common criticisms of these two drafts are that they are sometimes too clumsy on account of the complicated formalism adopted, and that they pay slight attention to summary procedure; that the procurator is the sole arbiter in criminal cases, and that as questions can only be asked by the presiding judge, the best evidence cannot always be obtained.

Coming now to the organization of the courts. Courts properly organized in accordance with the Law of Judicial Organization have been established in the capital, as well as in all important provincial towns. In the smaller cities, because of financial embarrassments, these courts have not as yet been established; when cases arise in such districts they are still tried by magistrates as courts of first instance, with definite procedure, subject to appeal to the High Courts and the Court of Cassation the substantive laws they administer are the same as those administered by the properly organized courts.

According to the Law of Judicial Organization, we have four grades of courts, the Local Courts, the District Courts, the High Courts, the Court of Cassation. The Local Courts, the lowest

* See Illinois Law Review, October-November, 1918, *Revision of the Chinese Criminal Code*, by Dr. Wang Chung-hui.

grade, were abolished under the Yuan Shih-kai régime. The abolition was made without much reason.

The District Courts now have jurisdiction over civil and criminal cases. Their original jurisdiction covers (1) cases which formerly belonged to the Local Courts, and (2) all other cases except those which come under the jurisdiction of the Court of Cassation, e.g., offences against the internal and external security of the state. They also have appellate jurisdiction in regard to appeals from the Local Courts. When cases are tried which would have come before the Local Courts the trial is conducted by one judge only, but an appeal on these cases is conducted by three judges. In other instances, if the nature of the cases seems serious, the trial must be conducted by three judges.

The High Courts have two appellate jurisdictions; they hear appeals from the District Courts, and also sit as courts of final appeal to hear cases from the Local Courts. The trial must be conducted by three judges.

The Court of Cassation, besides sitting as a court of first instance as mentioned above, is the court of final appeal from the District Courts. The trial must be conducted by five judges.

Thus we have four grades of courts but only three trials, except of course in the matter of such offences as treason, which the Court of Cassation hears both as the court of first instance and as the court of last resort.

Non-contentious matters are also decided by these courts; but separate courts are established to try disputes arising upon questions of administrative law, and also offences committed by military persons.

Since we have plurality of judges, the jury system has not been adopted. It is provided that branch courts shall be established where communication is difficult. This is probably meant to take the place of the English Circuit courts. Again, for the better protection of society, the Law of Judicial Organization adopts the system of investigation, i.e., it appoints permanent public prosecutors who are responsible for the repression of crime. A procuratorate is attached to every court. The Procurator-General is the head of the procurators. The functions of procurators are thus specified:—

(1) In Criminal Cases:

To make searches, institute prosecutions, conduct prosecutions, and supervise the execution of sentences as provided by law.

(2) To act for a party to a case, or on behalf of the representative of some public concern, as provided by law.

It is also provided that each court is to have separate civil and criminal divisions, in order that there may be better specialization. Both judges and procurators must be duly qualified. Their knowledge of law and procedure is first tested by examination, this test having been satisfactorily passed there is a further test of their administrative capacity by making probational judges or procurators. If this double test proves them capable, they can become judges or procurators in the inferior courts. Only judges or procurators of standing can obtain appointments in the High Courts, or in the Court of Cassation. The independence of the judges is secured in this law by provisions that they are not to be removed or suspended except on grounds permissible by law, and that their salaries may not be reduced.

To safeguard the interests of litigants and accused persons lawyers have been allowed to plead in all courts since the beginning of the Republic.

If the organization of the courts is open to criticism, it is chiefly with reference to the number of judges. As the courts are constituted so many judges are required that it is difficult to secure adequate salaries and a proper dignity for each. Again, the practice of leaving appointments and promotions in the hands of the executive has a tendency to somewhat impair the independence of the judiciary. It is also a matter for discussion as to whether plurality of judges is the best system, or whether circuit courts are more convenient than branch courts.

If maladministration sometimes occurs, it must be remembered that the judiciary has not yet reached its tenth year, and that the judges have as yet few precedents to guide them in their decisions. If a procurator occasionally fails to carry out his duties in regard to the investigation of crime, such neglect, however regrettable, is unavoidable in the political transitional stage

through which China is passing. These defects are more accidental than incidental.

Progress in the matter of prisons has likewise been rapid. There are thirteen model prisons, the administration of which follows the lines adopted in all foreign prisons.

There can be no doubt about the completeness of China's break with the inertia of the past. She is developing her inheritance, but it is an error to think of her institutions as still in a state of experimental uncertainty. China's progress during recent years has after all been phenomenal, and we may confidently claim, without fear of contradiction, that a new national spirit has been built up, and the country furnished with a legal equipment sufficient to carry it to still more glorious paths of achievement.

American Dyestuffs in Japan

[PREPARED BY FAR EASTERN DIVISION, U. S. BUREAU OF FOREIGN AND DOMESTIC COMMERCE.]

American dyestuffs are gaining a hold on the Japanese market, which has heretofore been dominated by German products exported through neutral countries. Imports of dyestuffs into Japan for the first three months of 1918 totaled 482,981 pounds, valued at \$1,580,566. Of this amount 193,342 pounds, valued at \$787,007, was received from Germany, and 13,242 pounds, valued at \$31,034, from Switzerland. Although the trade with United States has not reached sufficient proportions to warrant special notice in the official tables, where it is still classed under "other countries," we learn upon good authority that the greater share of the unclassified trade is with America.

Shipping facilities have become a large factor in the dyestuff trade in Japan, and, whereas American deliveries were formerly regarded with a degree of certainty, the decreased trans-Pacific tonnage has threatened the supply. Prices are subsequently soaring; American dyestuffs range from \$83 to \$479 per 100 pounds, and Japanese-made stuffs are even higher, ranging from \$100 to \$750.

With the entrance of Japan as a permanent factor in the manufacture of cotton and silk piece goods, the importance of finding an outlet there for the overproduction in the American dyestuff industry which is bound to follow the war, cannot be overemphasized.

Growth of Philippine Shipbuilding

[BY J. F. BOOMER, MANILA.]

The shipbuilding industry of the Philippine Islands is assuming important proportions. A scarcity of tonnage due to the war prevails in Philippine waters and grows more and more acute as the better vessels engaged in interisland trade are transferred to oversea service.

An effort is being made by the Philippine Government to stimulate the building of ships in the islands, particularly such ships as are adapted to interisland trade. This effort is meeting with a promising response in many parts of the country. Vessels to the size of 250 tons suitable for domestic commerce are being turned out in at least seven different sections of the Philippines.

Shipbuilding is not altogether new to the islands. During the past century the industry has been carried on to some extent. Not only have capacious lorchas, cascoes, barangays, and other peculiarly Philippine types of vessels employed in coastwise and river transportation been constructed, but larger sailing craft capable of interisland voyages and large enough to venture to the coast of Asia have been built. In the Province of Albay, galleons capable of oceanic voyages were constructed in Spanish days. It is well known that the vintas used by the Moros of the Sulu Archipelago were large enough to carry on a trade with the Dutch East Indies and to make voyages as far as Manila. These craft were sturdy and good sailers, revealing considerable constructive skill in their builders. The Moros have not lost their cunning in this respect and are still relied upon to render valuable service in the growing industry.

Those engaged in shipbuilding report a scarcity of skilled labor but say that unskilled labor is plentiful in nearly every section where the industry is being carried on. In all the localities in which yards are now in operation, and in many others, natural conditions are favorable for shipbuilding, waterways and timber being available in sufficient abundance.

The Projected Chefoo-Weihsien Railway

Renewed Agitation for Construction of a Railway Vital to the Future of Chefoo

Once again the proposal to construct a railway between the seaport of Chefoo and Weihsien is on the tapis. During the past few years a great deal has been said with regard to this project but so far nothing has been accomplished. Chinese merchants in Chefoo and cities which would be tapped by a railroad to Weihsien have from time to time held meetings and passed resolutions, and, it has been reported, have even collected funds towards construction expenses, but all in vain.

Now we have the Chinese of Chefoo once again moving. On December 11 the Cabinet at Peking received a lengthy telegram from the Chinese Chamber of Commerce at that port explaining that slow progress in the consummation of the scheme has been due to the desire of the Ministry of Communications to build the railway, while at the same time it is burdened with other ambitious projects and has no recourse to the necessary funds to carry out any of them.

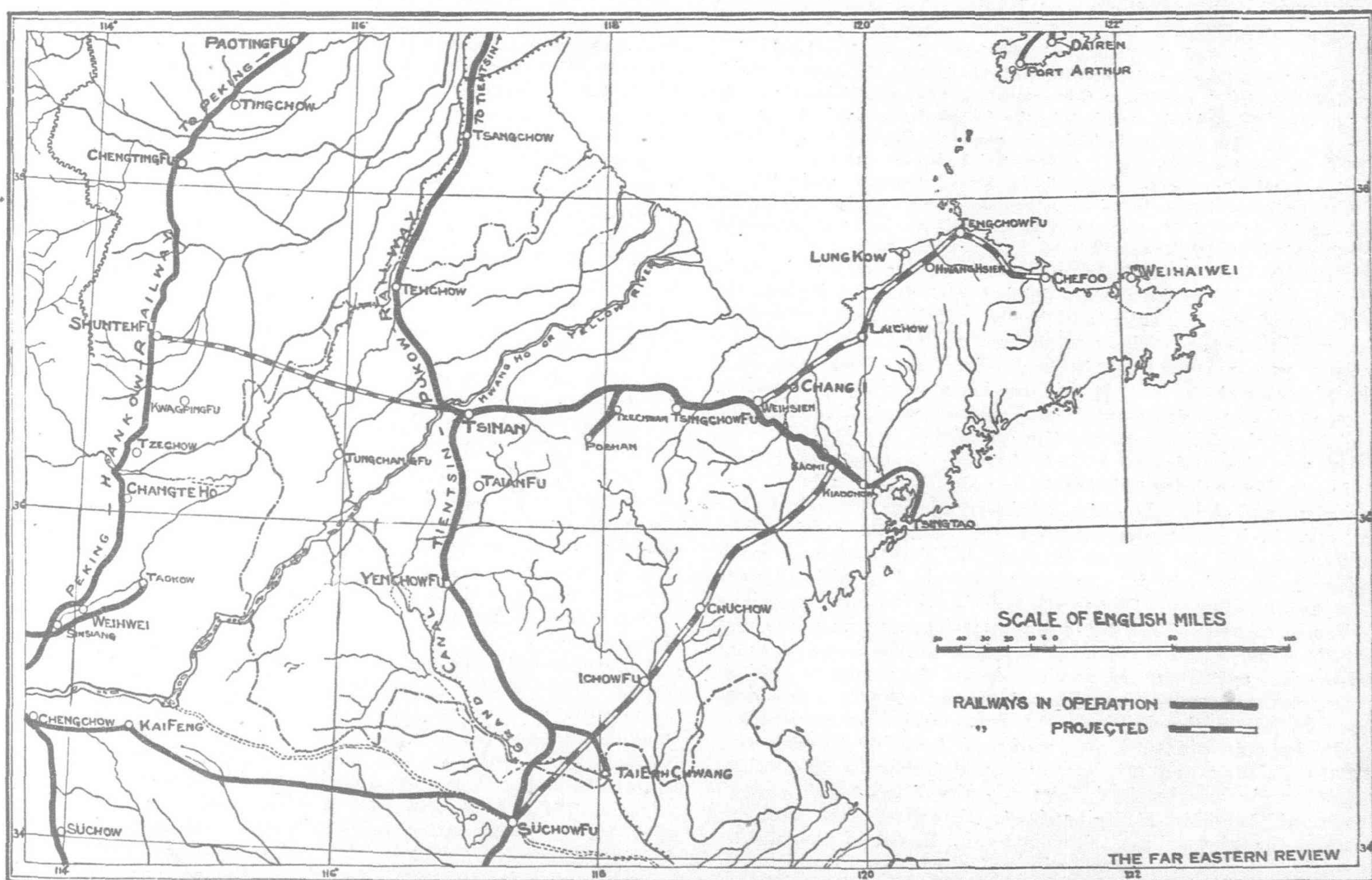
The Chamber of Commerce bluntly expresses the view that it is a waste of time to wait for the Government to construct the proposed line and suggests that the Government should now declare it a mercantile project and authorize the Chamber of Commerce to undertake construction work. The Chamber of

Commerce declares its ability to raise the necessary capital from the merchants of Chefoo, Hwanghsien, Weihsien, Tsinanfu and other cities in Shantung Province, and promises promptly to proceed with arrangements for the project in order that construction may be begun at an early date. The Cabinet, after discussion, decided to pass the matter on to the Ministry of Communications for consideration, and for the time being it is believed in Peking that the request of the Chamber will be granted.

In 1908 sanction was given to the gentry and merchants of the districts to be traversed to raise funds for the construction of such a railway, but nothing came of the scheme although the merchants eventually applied to the Government at Peking for the registration of the Chefoo-Weihsien Railway Company, which they reported they had formed with a capital of Tls. 5,000,000.

In 1909 agitation was resumed, but once again died down without accomplishing anything material, failure to raise the necessary funds being primarily responsible.

In 1910 the persistent agitators believed that finances would be forthcoming, and the interest taken in the scheme by Mr. Sun Pau-chi, who was then Governor of Shantung, encouraged the



This map shows the projected railway from Chefoo to Weihsien and its relation to existing systems. The projected railways from Kaomi to Hsuehowfu (spelled on the plan Suchowfu), and Tsinan to Shuntehfu, which were the subject of an agreement recently secured by Japanese interests, are also shown.

promoters to endeavour to bring the project to completion. Mr. Sun Wen-chan, of Chefoo, a prominent advocate of the line, was invited to the seat of the Governor at Tsinanfu to discuss financial matters connected with the project, and he reported that of \$3,000,000 necessary to construct a railway from Chefoo to Hwanghsien—part of the distance to Weih sien—\$2,000,000 had already been signed for by various gentry. The Governor promptly replied that if \$2,000,000 were actually ready the promoters could start work, stating that the remainder could be secured from the Bank of China, and he agreed to offer the necessary security to obtain the amount. When the Director returned to Chefoo a meeting was held and it was decided immediately to begin work on the first section, and to make efforts to secure the construction of the whole line to Weih sien.

The optimistic promoters, however, received another shock, and in due course their inability to raise the funds requisite for the work was brought home to them. Realization of this fact eventually constrained the Chinese Chamber of Commerce to reconsider their position, and at a meeting in September, 1910, it was agreed to prepare a memorandum to the Governor of Shantung frankly declaring the inability of the Chefoo merchants to finance the scheme. Action in this respect appears to have been delayed till May of 1911 when the Chinese Chamber of Commerce made representations to the Taotai at Chefoo praying, owing to adverse circumstances, for the conversion of the project from a commercial enterprise to a Government undertaking.

This suggestion did not apparently appeal to the Government and it seized the opportunity to excuse itself by taking the view that the line was a branch of the railway from Tsingtao to Tsinanfu and that branch lines were not to be built with capital of the Central Government but by local capital, or, if foreign capital were employed, by German money, in accordance with Article VII of the "Railway and Mining Concession" embodied in the Kiachow Convention, as follows:

If at any time the Chinese should form schemes for the development of Shantung for the execution of which it is necessary to obtain foreign capital, the Chinese Government or whatever Chinese may be interested in such schemes shall in the first instance, apply to German capitalists. Application shall also be made to German manufacturers for the necessary machinery and materials before the manufacturers of any other power are approached. Should German capitalists or manufacturers decline to take up the business, the Chinese shall then be at liberty to obtain money and materials from other sources or other nationalities than Germans.

Any further immediate progress was arrested by the Revolution which broke out in October 1911 and resulted in the overthrow of the Manchus, and it was not till September, 1912, that consideration of the subject was revived, when a public meeting was convened by General Chu Tung-fung, the local Administrator at Chefoo. At this meeting a provisional committee of ways and means was formed, composed of twenty-six influential members of the Chinese mercantile committee.

It was then advocated that the line be constructed from Chefoo to Hwanghsien; thence to a point between Changi and Weih sien, and from there to Tehchow, on the Tientsin-Pukow Railway, it being contended that such a route would enjoy independence of the German Railway in Shantung, and would enable Chefoo to be in direct steam communication with all parts of China and Europe. The meeting declared its full recognition of the urgent need of railway communication, and its willingness that the required funds should be raised by the issue of shares and/or by means of a foreign loan. A summary of the proceedings was communicated by telegraph to the then President, Yuan Shih-kai; the Ministry of Posts and Communications; the Ministry of Finance; the Provincial Assembly of Shantung, and the Railway and Mining Bureau at Tsinanfu, and others. A joint reply was received from the Shantung Tutuh and the Provincial Assembly at Tsinanfu to the effect that they had endorsed the scheme in a telegram to the Board of Communications; but the Board threw cold water on the proposition by telegraphing a reply pointing out that the proposed line to Tehchow would necessitate another bridge over the Yellow River, which alone, it was estimated, would entail an expense of some Tls. 5,000,000. The Board, therefore, advised that some other route be carefully considered and that it be submitted with detailed information in regard to (a) the proposed methods of raising the required funds; (b) the estimated cost of the enterprise;

(c) the draft of rules to apply to proposed operations in general. In consequence of this a survey of the route from Chefoo to Weih sien was made by Chinese engineers in the spring of 1913, and a plan, based on that survey, was submitted to Peking.

In August, 1913, the Government communicated to the Chinese Chamber of Commerce at Chefoo its recognition of the necessity for the construction of the line, and admitted recognition of the Government's obligation in this respect.

The Government, however, took no steps to bring the railway into being, despite the fact that the Chefoo promoters of the enterprise repeatedly applied to Peking urging the authorities to start the work. Internal difficulties, and the great shortage of money, were, of course, responsible for disinterestedness on the part of the Peking Government.

The agreement made by the Government with Germany for the construction of the Kaomi-Hsuchowfu and the Tsinan-Shuntehfu Railway naturally raised indignation among the Chefoo residents, and again strong agitation ensued for the construction of their line. Another petition was sent to the Capital imploring the Government to carry on the railway in order to arrest the gradual and marked decline in trade being suffered by Chefoo. The foreign Chamber of Commerce backed up the agitation of the Chinese by calling a meeting of foreign residents and property owners on April 21, 1914, and agreeing to despatch a memorial to the Diplomatic Corps at Peking urging the construction of the railway and a breakwater in the harbor. As a result of that memorial the construction of the breakwater was ultimately agreed upon, and has been under construction for some time. The railway, however, is no further advanced.

Germany, whose interests solely were concerned with the development of Tsingtao, naturally did not look with favor upon any scheme calculated to increase facilities for competition at Chefoo, and opposed the project as much as possible. The outbreak of war and the lack of funds enabled the Central Government to comply with Germany's pressure without offending the Chefoo Chinese, and the whole project, so far as the Government was concerned, was pigeon-holed. As Chefoo is the only port actually under control of China between Tientsin and Shanghai it stands to reason that its claims and commercial potentialities cannot continue to be neglected, and the agitation which has now been resumed is likely to continue until something is done to meet the wishes of those merchants who have maintained their stand at Chefoo for many years.

The opening to foreign trade of the port of Lungkow, which is opposite the important trading centre of Hwanghsien, is another factor urging the early construction of the projected railway. The district round about Hwanghsien is said to be one of the richest in Shantung. The population is estimated at over 80,000 people, many of the rich merchants being men who made their money in Manchuria in Russian times. Familiar with foreign methods as these men are, and consequently being progressive, they realize fully the tremendous influence rail communication would have upon their trade. As it is a large grain business is carried on with the rest of the province and the North, shipments coming and going by junk, mainly to Dalny, and Newchwang, through the port of Lungkow, some fifteen miles distant on the Gulf of Pechili. Lungkow is now being improved and can easily be reached by a branch line from Hwanghsien.

Commercially Hwanghsien is an important trade centre, apart from grain transactions, and largely handles silk, vermicelli, native sundries, piecegoods, and the cheap foreign manufactured articles which generally find a sale among the Chinese. The region is rich agriculturally and land values are said to be higher there than anywhere else in the province. Fruit of all kinds is grown, as well as wheat, millet, sorghum, beans and peanuts, the latter being planted very extensively and producing considerable oil. In foreign commerce the region is mainly noted for its strawbraid, being the northern end of the Laichowfu district. Formerly all the braid went to Chefoo, but except from the regions about Hwanghsien it now goes overland via Liachow, and Shaho to Changling on the Shantung Railway, and thence to Tsingtao.

The construction of the railway from Weih sien to Chefoo would naturally restore the strawbraid trade to the latter port,

and from other important places would carry silk and agricultural products. The whole country that would be traversed is well stocked with good cattle and unusually fine mules. Mule carts form the most common means of travel, the wealth of the people enabling them to pay this transportation in preference to the cheaper means in vogue elsewhere. The mules are a large-breed variety and sell from \$200 to \$300 each. It is estimated that as the railway would pass one of the richest parts in Shantung, enjoying a large native trade, it should be an assured success.

In connection with railway projects in Shantung and the claims made by various parties that they are entitled to concessions because of priority of application, it is interesting to recall the fact that a British firm established in Chefoo made application for the particular line in question as part of a greater scheme, so long ago as 1868, repeating the application in 1875. Documents in connection with this early effort to have railways established have been kindly placed at our disposal by Dr. G. E. Morrison, Political Adviser to the President of China. These constitute an interesting addition to documents connected with the development of railway communication in China, and as such, and to establish the early activities of British merchants at Chefoo, we are glad to publish them. They are as follow:—

Old Appeal for Shantung Railway Concession

Copy of letter from Messrs. Fergusson & Co., British merchants, Chefoo, to Sir Rutherford Alcock, H.B.M.'s Minister, etc., at Peking:—

Chefoo, July 13, 1868.

SIR,—As long resident merchants at this port, and having a large and direct interest in the extension of trade with the interior of the Province of Shantung, we have now the honor to submit to your Excellency a proposal to construct a railroad between this and Tsinanfu, the capital city of this Province, as one of the chief means needed to facilitate our intercourse with the inland markets, and we humbly trust that your Excellency may be able to recommend its speedy adoption by the Chinese Government and that you may obtain for us the privilege of carrying this project into execution.

We consider that any lengthened statement of the advantages likely to accrue to British commerce from the adoption of our plan for the proposed railroad would be quite superfluous, as they seem to be now admitted by all who have turned their attention to the subject.

We will, therefore, proceed at once to explain the line of country which we entertain as the most desirable for the railroad, and to state what we desire to obtain in connection with the same as promoters of the undertaking.

The Eastern or Chefoo terminus of the road would require to be conveniently near the town of Yentai at this port.

From Yentai the road would run to Shanhyen, and from thence the stations would be as follows:—

Yentai, Feshanhyen, Tatsintien, Whanghyen, Perma, Hwongsanquong, Chouchaou, Laichoufoo, Sarhoa, Shinghoa, Change, Hanting, Weihyen, Changlao, Chingtsaofu, Lintze, Keelinchia, Changtien, Cheutsun, Changsan, Tseping, Changchew, Loongsan, Tsinanfoo.

(Here names are appended in Chinese characters).

We have written the names in Chinese for the sake of greater exactitude, and Your Excellency will perceive that including the two termini there are 24 important places to be linked together by this iron way. There are also some intermediate villages or towns which have not been mentioned where it might be desirable to have stations or short branch lines, and any such additions should form an external part of the proposed road.

The railroad at first to consist of single (line).

Having thus sketched out the route we propose for the iron way, we now beg leave to submit that we are quite prepared to find the capital required to construct this road provided we can obtain the necessary authority from the Chinese Government to do so and we confidently rely on Your Excellency's influential support to place our proposal in such a manner before the Chinese Government that they may be induced to confer upon us the power we require to carry it out. We feel sure that Your Excellency's knowledge of the importance of rapid communication between different parts of China will prompt you to advocate the construction of a railway through this rich province on the ground of its public utility to the Court of Peking, and moreover that viewing this affair from a Statesman's elevated point of view you will be able to discern higher reasons for this measure than we could possibly hope to do.

We content ourselves merely by stating that a line of railroad from Chefoo to Tsinanfu in conjunction with a railroad from Peking to that city would bring the Imperial capital into easy and quick communication with a good seaport all the year round and this circumstance would prove useful in many ways to the Chinese Government. We consider, therefore,

that should we be permitted to carry out our project we should be the cause of great good, not only to British trade but the Government of this Empire.

We do not wish to conceal that the permission we seek for would benefit ourselves, but we submit that this result to our application would be a legitimate compensation for the trouble that we have had and shall bestow in bringing this matter to a conclusion.

We certainly ask for privileges and powers, but only for such as will bear fruit reciprocally to ourselves and others.

We now proceed to state what those powers and privileges are:—

We ask for the exclusive permission and right to construct at our own expense the railroad above described and to be the exclusive proprietors of the same. In order to do this we require from the Chinese Government a concession to acquire sufficient land for the railroad of 100 feet wide and for the stations and premises at the termini and the intermediate places on the line as may be deemed by us necessary for the successful working of the road.

In places where the road passes through common or untitled land we request a free gift of such land on our paying the annual land tax paid by the natives to the crown.

Where the land passes through private property we request the right to purchase so much of such land as we may require at a valuation placed by special Commissioners acting conjointly with us or our agents, and the land thus valued to be paid for with 80 per cent. of its value in money and the other 20 per cent. in the stock shares of the railroad at par. This latter we propose because it would interest the land holders on the line of road in its prosperity and safety.

We ask that all the iron rails and machines and sleepers and plant and locomotives and rolling stock to include all the material for constructing the railroad should be admitted free of duty for 5 years dating from its commencement. We ask leave to work the adjacent coal mines on such moderate terms that may offer an inducement to do so—say at paying a Royalty of 5 per cent. on the value of the product in lieu of all taxes and charges for so doing.

We ask that in lieu of all taxes on the railroad a payment of 5 per cent. on the net profit of the railroad should be accepted.

We ask that no taxes should be levied or collected on any goods or passengers in transit during their passage through any part of the road.

We ask that the Chinese Government protect by their Authority the construction and maintenance of the road and all its appurtenances. We further ask that we are to have the power to associate with ourselves other persons and form a company for the purpose of making and working and owning the road, and that such company be considered as, and have all the privileges of a Chartered Corporation. We ask for the right of quarrying and using all the stone required within 8 years from the same date; this condition to be dependant on the construction of the road not being impeded or destroyed or injured by rebels or popular tumults.

In conclusion we beg to assure Your Excellency that should the above privileges be accorded to us we will do all in our power to conduct the whole enterprise most peacefully and in accordance with any conditions that Your Excellency may wish on the part of Her Majesty's Government, and in submission to the Authority of Her Majesty's representative in China.

We have the honour to be,

Sir,

Your Excellency's most obedient humble servants,

(Signed) FERGUSSON & Co.

Copy of letter from Fergusson & Co., British Merchants, Chefoo, to T. F. Wade, Esq., C.B. etc., H.B.M. Minister, Peking.

Chefoo, 4th November, 1875.

SIR,—We now desire to submit to your Excellency a proposal for constructing a railroad from the Port of Chefoo to Tsinanfu, and thence to Tientsin and Peking, and we beg respectfully that you will lay it before the Chinese Authorities for their consideration and should it meet with their approbation that you will endeavor to obtain their permission for us to carry out the project. The principal motive for our desiring to get the proposed railroad constructed, is, to obtain greater facilities of communication with the interior of this province and the North of China, and thereby an increase of our commerce (which chiefly consists in the import of British manufactures), and the extension of British trade in this portion of the Empire.

While, however, seeking our own interest and those of the British trade generally in this proposal, we feel confident that if realized it would be most beneficial to the Chinese Government and people, and consequently be worthy of its attention; but we do not venture to lay any stress on the advantages that would therefrom accrue to the Chinese Government beyond submitting that permission to construct the road would result in its own benefit as well as in that of British trade.

We are ready to carry out the project of constructing the railroad either by:—(1) Advancing the cost of the road as a loan to the Chinese Government on its guarantee and security of the road for the repayment of the amount, with a certain interest on the capital required for the same,

and with a contract to construct the road at so much a mile for account of the Chinese Government, or to construct it according to our Engineers' plan under their direction, or (2) By constructing the road on account of ourselves and our friends in England, with a reservation of a right to the Chinese Government of purchasing the road from us after a stated time and on terms to be agreed on, or without such reservation as might be more agreeable to them. In case of contracting to build the road for the Chinese Government we should not include the price of the land that the road would be built upon, but we shall merely ask to appropriate the land required for the purpose as we might point out, but in case we constructed the road for our own account and of our friends as above mentioned, we would ask to have the price of the land settled beforehand, with the necessary permission to take possession of the same. As, however, it would be more expedient to pay the owners of land for the ground the road would occupy, even in case the road were built for account of the Chinese Government we would advance the price of the land together with the cost of the road as before mentioned.

The price at which we would contract to build and equip the road (exclusive of the cost of land) would be Tls. 24,500 of Chefoo sycee per mile from Chefoo to Tsinanfu, and the same rate from Tsinanfu to Tientsin and Peking, with the exceptions to be presently mentioned. This price would include a single main line laid with 40 lb. iron rails to the yard on wooden sleepers 6 feet long, with the necessary rail at stations; all stations for ordinary requirements, locomotives and sufficient rolling stock of carriages and waggon to meet the ordinary traffic; workshops with engine houses, offices and furniture; electric telegraph for use of line, and every material required to put the road in complete working order.

The bridging of the Yellow River for the line from Tsinanfu to Tientsin cannot be estimated at present, and would not be included in above proposal, but we would undertake to construct the bridge and river embankments required for its safety on reasonable terms, when the exact locality for crossing that river be decided.

As the line of road from Tsinanfu to Tientsin and Peking would require for its stability that the rivers flowing from the westward which have so often inundated large portions of the province of Chihli should be dredged, and other measures adopted for carrying off the superabundant waters, the estimated cost of constructing the road already mentioned would be exclusive of such dredging and other precautionary measures for preserving the road from the evil effects of the inundations.

We shall be quite prepared to hand in estimates for all the above mentioned works, if the Chinese Government accede to our proposal, and to undertake them at a reasonable price. The estimated cost of the road would be exclusive of the free use of quarries of stone and earth, uncultivated land adjacent to the line of road, for the purpose of building and ballasting same, which we would ask the Chinese Government to concede us together with the permission to construct the road.

The quantity of land required for the road would be 85 mow per mile inclusive of stations at about every 5 miles if required. The main road as far as Tsinanfu would pass through or near the places mentioned in subjoined document A, but we would connect the main line with any other places adjacent to it which the Chinese Government might indicate and we would ask permission to construct branch lines to the coal mines at Weihyen, Pesanyuen and other places along the road which might be deemed desirable. From Tsinanfu to Tientsin the proposed road would pass through or near the places mentioned in subjoined document B. with such deviation as might suit the Chinese Government if conformable to the Engineers' plan for the safety of the road.

The road would join the Grand Canal at Teichou and should the Chinese Government wish it to proceed northward to Tientsin by way of Hokienfoo and Senchow it would go from that last named place to Tientsin. But should the Chinese Government allow the road to be built on the bank of the Grand Canal, it would pass its east bank the whole length of its course to Tientsin direct. From Tientsin to Peking the proposed road would pass through or near the places mentioned in subjoined document C., or by any other feasible route adjacent to this line which the Chinese Government might point out. In case the Chinese Government grant us permission to build the road for our own account we would contract to make a special tariff for the conveyance of all Government officials and troops and stores and mails. The station masters and local engineers in the first instance would be British subjects until the road was either purchased by China as above mentioned, or its cost refunded to us should they decide to construct it by capital loaned to them, but in due course we propose that natives who have passed examinations to qualify them for the employment should be appointed to those posts, on nomination by the Chinese Government. In our estimate of the cost of the road we cover the amount of duty payable on the material, and we have done so as we think any request to be exempted from such duty might cause the provincial authorities to oppose the project while the knowledge that it would add to the customs revenue might facilitate their support of it. In case the Chinese Authorities approve of our proposal, and grant us permission to build the road, and there be any other

matter connected with it which has not been here mentioned, we shall be quite ready to submit further proposals or modifications of our plans which might be required to carry out the affair successfully.

We have the honour to be,
etc., etc., etc.,

(Signed) FERGUSON & Co.

P.S.—Instead of documents A., B. and C. mentioned in the body of above letter we send herewith a map of the country between this port and Peking with the proposed railroad marked on it in red ink and it marks the principal places the road would pass through.

F. & Co.

Motor Boats and Marine Machinery in Siam

[BY VICE-CONSUL CARL C. HANSEN, BANGKOK.]

The number of motor boats imported into Siam for the past four years has been comparatively small, owing to the fact that small crafts of that kind are usually built in the local yards, teakwood, which is abundant in this country, furnishing the construction material. On the other hand, fittings and machinery, not being manufactured here, necessarily must come from abroad.

Marine motors of all sorts are classified by the Siamese customs under the head of marine engines, and the available statistics for the four years ended March 31, 1917, show that 130 engines, valued at \$110,801, were landed at the port of Bangkok in 1913-14; 93 engines, valued at \$48,844, in 1914-15; 112 engines, valued at \$30,650, in 1915-16; and 221 engines, valued at \$78,733, in 1916-17. Of the total number of engines imported during the four years under review, the United States supplied 3, 16, 68, and 161 engines, respectively, and most, if not all, of these were attachable rowboat motors, the demand for which has been greatly augmented lately. The number of licensed motor boats in Bangkok probably reaches about 1,500.

The present demand for marine motors in this district is greater than the supply on hand, and the indications are that a great number of the small type of motor engines will be needed within the next few years to supply the motive power for most of the thousands of light craft that ply on the numerous waterways of Bangkok and its district and for the fishing boats that operate in the Gulf of Siam.

Equipment and accessories for motor boats are likewise not manufactured in this country, and, as all the available stocks are now being rapidly exhausted, there will be a ready market here for such articles after the war. It would seem advisable for American manufacturers to open up business connections with Bangkok importers as soon as possible and ascertain what class of articles are most likely to be in immediate demand when shipping activities are resumed again under normal conditions as before the war.

Effect of War on Chungking's Export of Bristles

(BY U. S. CONSUL G. C. HANSON, CHUNGKING.)

Bristles have been exported from Chungking in considerable quantities for many years, and just prior to the outbreak of the war in Europe the trade was increasing to a gratifying extent, the export of 21,359 hundredweight of 100 pounds each in 1914 being the record. The export totals for the last five years follow: 1913, 20,473 hundredweight; 1914, 21,359; 1915, 21,271; 1916, 16,235; and 1917, 15,652 hundredweight.

It will be seen that as the war progressed, exports of bristles declined. Besides the obstacles encountered in attempting to secure ocean shipping space and the disappearance of the German market, factors that had a bad effect on the trade, internal political troubles, and brigandage largely prevented, in 1916 and 1917, shipments of unprepared bristles from interior points to Chungking, where they are dressed for the foreign market.

There are a number of establishments in Chungking where bristles are prepared for direct export under foreign supervision. Bristles are one of the few exports that are shipped direct from Chungking abroad.

Throttling Industries in China

Squeeze and Superstition Prevent Development of Natural Resources

The photograph accompanying this article tells a story. It was taken by Mr. Roy Chapman Andrews, the naturalist, while at Tengyueh, in south-western Yunnan Province, and what is remarkable about it is the pailou—or ornamental arch—standing above the waterfall, and the circumstances compelling its erection. Some time ago a Chinese with sense realized the value of the head of water provided by the fall as power to drive a mill, and forthwith he erected a primitive grain grinding establishment on lines common among the Chinese. Hardly had the mill begun to operate than the official then in charge of the district noticed, or alleged he did, some disturbance among the spirits of wind and water—quite sensitive little fellows in China—and seeking the cause discovered that they were objecting vociferously to the establishment of the mill.

To appease the spirits and restore "fengshui" to its wonted dignity and influence by wiping out the insult offered it by the utilitarian Chinese the official haled the latter to his yamên, and after considerable haranguing—which apparently failed to extract certain pecuniary offerings from the miller—he denounced the industrialist and demanded that he pull down his mill and pacify the outraged spirits in adequate manner by erecting at the top of the fall the pailou that is now a prominent feature of the landscape.

The photograph affords reliable testimony of the downfall of the progressive industrialist and the triumph of superstition (or the inability of a poor man to meet the demands of a rapacious mandarin), and gives one further instance of the crass stupidity which has actuated thousands of officials throughout this land to oppress legitimate attempts to develop the latent natural resources.

Many instances could be cited to demonstrate that the failure to develop industries in China to an extent commensurate with existing possibilities is due either to superstition or official propensities for "squeeze," but mainly the latter. It is known that railways and telegraphs were originally opposed on account of the dread of the people of the wrath of the spirits who would be disturbed by them, and mining on an elaborate scale was obstructed until very recent times because it was believed that deep shafts would aggravate the dormant dragon and cause it to rise in wrath from

the bowels of the earth and spread pestilence throughout the country in the vicinity of the shaft.

Happily superstition of this kind is now rapidly dying, but it would appear that the officials in the interior who imagine that any profitable enterprise is fair game for them to batten upon still exercise their "right" to tax it out of existence. Some time ago we exposed the criminal folly of officials beyond Kalgan

who completely dislocated a newly developing trade in liquorice root by taxing it to a standstill. In this case a trade worth some \$200,000 per year to the territory producing the root was stopped by the rapacity of the officials, and it was only after strong diplomatic pressure that the Peking Government took steps to reprimand the culprits and restore the trade. We also pointed out the action of officials who prevented a newly-erected flour mill at Chinkiang from turning its wheels until the owners had agreed to hand over an extortionate amount of their profits in the shape of a "tax," and the case of Chinese in the same vicinity who were prevented from erecting a modern oil mill until they agreed to hand over an untoward sum. Now we have a bitter complaint from Canton in the shape of an article in the newly-established "Canton Times," the organ of the Southern Government, against the practice which is common all over the country and which has been responsible more than superstition for the closing of many industries and the prevention of others from starting. The paper alluded to stated its case in sweeping terms, as follows:

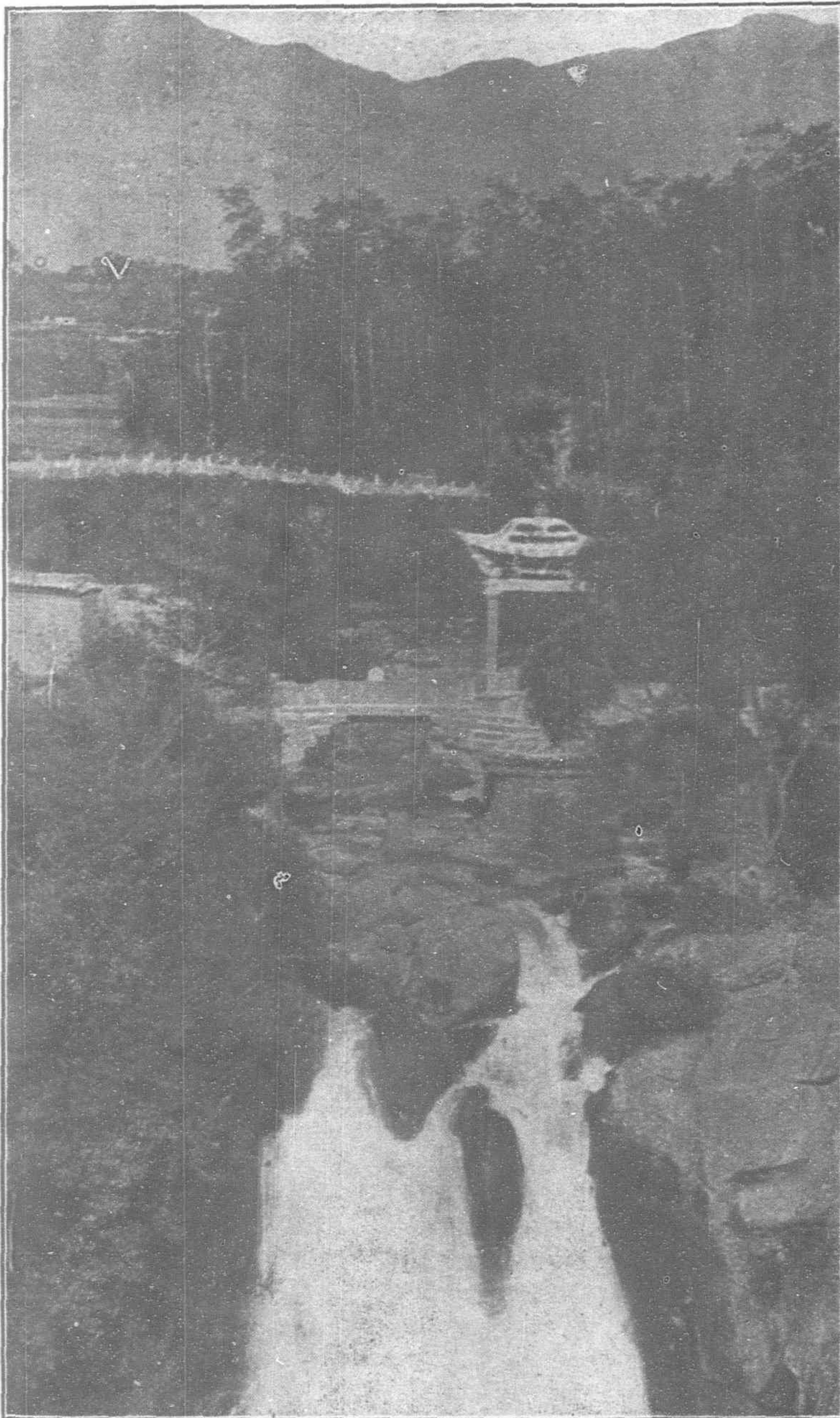
Whenever there is an industry in China—be it mining, agricultural, shipping, or manufacturing—proving itself lucrative, one may be sure that the officials will turn their attention on it, as bees would gather on the honey.

Nine times out of ten this official attention is not beneficial and is seldom a welcome sign to the recipient. In fact, it is to be avoided like bad company, or the conse-

quences are anything but encouraging, if not detrimental.

Officials are in the habit of advising the people of the necessity of starting and developing industries. When these industries begin to thrive, the officials will be the first to devise all sorts of means to bleed them until they cease to exist. And then the officials wonder why the country is not making any material progress.

Some thirty years ago, the China Merchants' Steamship Company was organized by the Chinese merchants in Shanghai. When this company began to prosper, the officials insisted on controlling it, and from the time



A PAILOU TO PUNISH AN INDUSTRIALIST.

the officials began to put their fingers into the concern, the progress of the company has proceeded at a snail-like pace. The many Japanese shipping companies that started long after the China Merchants' Steamship Company have individually far surpassed the Chinese Company not only in the number of ships but also in the volume of business. To-day, the Japanese flag waves in nearly all the great ports of the world, while the Chinese flag is not seen outside the treaty ports.

At the beginning of the European war, the antimony industry in China was very active—the demand for the ore was greater than the supply—and prices soared to such an extent as to attract the indiscriminate opening of mines in Kuangtung, Hunan, and Kuangsi. Fortunes were made by the mine-owners, but bigger fortunes by the speculators in Hongkong. Seeing this evidence of prosperity, the officials set up rules and regulations for taxing the antimony and regulus, not only at the mines or smelters, but along the route of transportation to the port of shipment—with the result, that owing to the taxes being paid not once but several times on the same cargo, it became at last impossible, when prices dropped, for the antimony industry to continue.

Last year the wolfram industry began to develop rapidly owing to abnormal prices. In the districts where the ore was found the natives abandoned their rice fields to dig or mine the ore, which they could realize quickly for ready cash from merchants who were collecting the ore wherever it was worked. After the wolfram industry had a fair headway, then the officials stepped in. First, the Bureau of Finance in Kuangtung raised a tax of \$5 per picul; then the military commanders added \$7 on to the tax; but on its way to Canton, the ore was taxed again by *likin* stations and petty officers, so that when the ore reached this city, the tax on the ore per picul would run between \$15 and \$17, excluding the costs of transportation, and the risks of capture by pirates *en route*. Even with the extortionate tax upon the ore, the wolfram trade was found paying, as the prices remained high and steady. But as soon as peace was declared in Europe, the price of wolfram dropped so much that it is now impossible to work the ore with a profit, unless the officials will materially reduce the tax. We understand that the Bureau of Finance has reduced the tax to \$3 per picul, but the military commanders are still holding to the old tax. The price of wolfram two months ago was between \$60 and \$70 per picul, but now it fetches a little over \$20. The cost of taxes and shipping the ore to Canton is between \$20 and \$25 per picul. So we may consider that the wolfram trade is practically dead, unless the Government will come to the assistance of the mine owners by considerably reducing the tax on the ore.

Thus we see that industries in China will never be made profitable unless the officials will refrain from interfering with them either by way of regulations which are usually stupid and obstructive, or by extortionate taxes, which will kill any industry against foreign competition. Can our officials not be sensible enough to see that if China is to be a great country it must depend upon its industries; and if its industries are to prosper, a minimum tax should be levied, and the less official red-tape and obstruction, the better it is for the industries?

An Improvement for the West River

New Work Proposed to Benefit the Port of Wuchow

[BY PROF. MIDDLETON SMITH, M.Sc.]

Admiral Tan Hsia-teng has forwarded particulars of a new project for improving the West River to the writer; after a careful study of the details of the suggestions made, it is possible to express the hope that the work will be commenced at once. Captain G. W. Olivecrona, Engineer-in-Chief of the Conservancy Works of Kwangtung, is responsible for the proposals. As the great difficulty in connection with all new engineering work in China is finance, especially at this period, it may be well to state at once that the total cost of the work in Hongkong currency is not large, for it is estimated at \$116,000. And as Wuchow trade will benefit very greatly from the proposed improvement, it is suggested that the Maritime Customs authorities should impose a tax of 0.25 per cent. on the trade value of that port, which, according to the Maritime Customs Trade Report for 1917, amounted to Haikwan (Customs) Tls. 15,490,167. Thus a 0.25 per cent. tax would produce a sum of Haikwan Tls. 38,700 or \$62,000 (Hongkong currency), and therefore the new work would be paid for in two years. It is said that the annual loss owing to the stoppage of traffic on the river is valued at \$35,000. Thus the sum saved in four years would pay for the whole of the works.

This is mentioned to show that the traders at Wuchow are sure to favor the carrying out of these new proposals.

Of course if the provinces of Kwangtung and Kwangsi were administered in the way that Egypt or India is administered, the costs should be divided between the tax-payers of the two provinces. For the improvements will most certainly stimulate trade. However, practical men have to make the most of things as they are, and they sometimes accept arrangements, not because they are ideal, but because they are likely to succeed. The Maritime Customs authorities will, if they agree, be able to furnish the money; while it is doubtful whether the Chinese Government authorities of the two provinces could do so. In fact it is practically certain that they could not, even if they were desirous of so doing, unless they obtained it by a loan from a foreign syndicate.

So far as the trader at Wuchow is concerned he has a very definite grievance every year, for his goods must be transhipped from steamers to lighter craft during the dry season. At a place called Suntan, about 22 miles from Wuchow, there is a silt deposit forming a bar; and whenever the water level at Wuchow registers on the Customs gauge 3 feet, the bar stops traffic for all vessels drawing over 8.5 feet of water. Then the cargo must be moved into smaller craft in order to transport it to Wuchow. The curious thing is that Captain Olivecrona cannot account for the formation of the bar; but facts are facts, and the bar has been formed by nature. Nobody doubts its existence. Two years ago a commercial association in Wuchow arranged and paid for dredging undertakings; no rocks were encountered. The stratum of the river is built up chiefly of fine sand intermixed with clay. When at rest the material is fairly compact, but it soon liquifies if it is stirred up in the water. The practical problem is to arrange that vessels of at least seven feet draught shall be able to proceed right up to Wuchow every day of the year. As a matter of fact, if the new proposals are carried out, that will be possible; while vessels of 13 feet draft will be able to cross the bar for at least 297 days each year. At present a provisional Customs station is established at Suntan, and in 1916 it was at work for 130 days, while in 1917 it was at work for 158 days. Before then the average was much less, about 68 days, and it is suggested that the bar has been silting up more rapidly of late.

It has been discovered by practical experience that dredging of itself is not sufficient to keep the channel clear. It is proposed, therefore, to put in training works, which will cause the water to scour out the channel required. Dredging will also be carried out in conjunction with the training works. The training works are to consist of "cribs," so as to restrict the channels. These "cribs" appear to be very much like the "groynes" used on the English coast to prevent the sea from scouring away the cliffs. The only constructional work involved is the building of the cribs, the effect of which will be to increase the velocity of the stream.

The technical details involved are comparatively simple and will only be of interest to civil engineers who are engaged in similar work, and they will find nothing unusual in the details. It, therefore, only remains to express the hope that, for the sake of trade on the West River, the plans of Captain Olivecrona will be carried out quickly. It is obvious that many improvements will be made in the waterways of China during the next few years.

The South Manchurian Railway recently announced an increase of 25 per cent. in wages for employees drawing less than Yen 100 monthly, and now announces a further increase which will make a total of 50 per cent. for those drawing less than Yen 30, 40 per cent. for those drawing between Yen 30 and 50, and 30 per cent. for those drawing between Yen 50 and 100. Employees drawing more than Yen 100 were granted an increase of 20 per cent. originally, and this will not be changed.

It is noticeable that the total increases since the War amount to 90 per cent. for the Yen 50-100 class, 100 per cent. for the Yen 30-50 class, and 110 per cent. for the class drawing less than Yen 30.

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Projected Improvement of the Min River

The report issued some time ago on the Min River between Foochow and Pagoda Anchorage by Mr. H. von Heidenstam, c.z., Engineer-in-Chief of the Whangpoo Conservancy Board, Shanghai, contains suggestions for the improvement of the stream so that navigation may be made practicable. Mr. Heidenstam points out that he approached the problem of the river improvement at Foochow from the point of view of securing the greatest advisable improvement—conversant with the probable future demands and interests of the Ports of Foochow and Pagoda Anchorage—in the most economical and technically efficient manner.

The solution arrived at is a scheme to produce a minimum depth of 10 feet at low water—which means, at high water of ordinary neap tides, 16-18 feet in the upper reach and 22 feet in the lower reach (on account of the larger tidal range). The work, executed in three years would cost \$900,000.

It would mean unhindered navigation at any time of the day or night for coast-steamers, tugs, launches, lighters and junks of up to 9 feet draft (i.e., first class inland canal navigation conditions) and it would enable steamers of up to 16 feet draft to enter or leave twice a day with the help of the tide.

In view of the relative position of Foochow and Pagoda Anchorage, the probabilities of development of future shipping and the limited financial strength and development of Foochow, further deep water improvement is not indicated and it is doubtful if it would ever be economical.

The institution of a River and Harbour Board; the imposition and collection of a tax on trade (say up to 10 per cent of the Customs dues and shipping); the arranging of a loan to have the work done in three years; these are all things which the history of the other Chinese ports has shown to be feasible. But such schemes have in every case required time to materialize. There are complications of many sorts and they may prove larger from the local horizon of Foochow than they appear seen from the safe distance of Shanghai.

Mr. Heidenstam emphasizes that this is a *preliminary* investigation and a *preliminary* scheme, which admits of much improvement and adjustment. The question of what draft is the most suitable for inland navigation, 6, 7, 8 or 9 feet and the corresponding canalization depths, what height should be given to each training work, etc., may be profitably further investigated. But the works to produce 6 feet are in any case very much of the same nature if not too extensive as to produce 10 feet, and as Foochow is in direct communication with the ocean, the tide will allow full benefit to be taken of any depth secured within the limits contemplated, and therefore 10 feet appears to be the best solution. And the question of the height of cribs and dams, and their position, can be left until the final detailed project is formulated, which could best be done after careful local study and some little local experience. Besides, the channels and shoals vary so much that the actual position of a training work can only be decided at the moment when it is to be constructed. The estimates are, on account of the nature of things, not final in detail, as the river rapidly changes, but the total is, Mr. Heidenstam thinks, quite on the safe side, as an increase in one place is likely to be balanced by a decrease in another. The following is a summary of the report:

Characteristics of the Min River

The Min Kiang proper is formed by three large tributaries, the Kien Ki or Min Kiang from the north-east; the Shao Wu Ki or Tin Kiang from the West and the Ning Hua Ki or Tashi Ki from the south-west. The largest of these, the Kien Ki (which is also sometimes called the Min River) rises near Chekiang, in a mountainous region with summits of 8,000-9,000 feet altitude, and is navigable for small rapid boats to a point far above Kienning-fu to where fairly large craft ply in the flood season.

At the confluence of these tributaries Yen Ping Fu is situated and from there downwards to Shui Kow the river is navigable but only with care in the flood season. From Shui Kow to Foo-

chow, a distance of 43 geo. miles, a steam launch company is running a daily service, I understand, at all times of the year with shallow draft launches. At Hua Ani, 8 geo. miles above Foochow, the river bifurcates in two arms, a northern (on which Foochow is situated) and a southern, which enclose and form the island of Nantai and unite again at Pagoda Anchorage (9½ geo. miles below Foochow). From here the river again flows in one channel with some smaller islands and through two narrow defiles, the Ming An and the Kin Pai Pass, until it finally debouches in the China Sea by two arms, between which lies the Wufu Island.

Practically speaking, all oversea navigation stops at Pagoda Anchorage, and from there cargo and passengers are taken by junk or steam launches drawing 4 to 8 feet, which, however, only can ascend the river at half or high tide. The approaches to Pagoda Anchorage from the sea have several bars, shoals and crossings with a least through depth of 11 feet at low water, which limits the draft of ships to, say, 25 feet at high water.

The last 30 or 40 miles of the valley of the Min River from a point some 10 miles above the top of the Nantai Island widens out somewhat and varies in width from half-a-mile to three miles. Sand banks and shoals are seen at low water along the river and also, at the foot of the surrounding mountains, low fields, which are intensely cultivated, but flooded during freshets. Throughout its course the river flows through high mountainous regions. These mountains, which occupy the whole drainage area of the Min River, are from 2,000 to 8,000 feet in height and supposed to be the outcome of a great upheaval, The Nan Shan, with its chains running north-east to south-west, parallel to the coast.

The general regimen of the Min is typical of a river in a mountainous region and as already mentioned the valley does not attain any considerable width until in the lower (tidal) region from Hua An (top of Nantai Island) to the mouth; where it broadens out to a couple of miles in both branches.

Drainage Area.—The entire catchment basin or drainage area of the Min River is calculated to 24,000 square statute miles (63,700 square kilometers), whereof 491 square miles belong to Chekiang and 384 sq. miles to Kiangsi, but all the rest to Fukien Province.

Freshwater Discharge.—The only river of similar character in south China about which reliable hydrographic data and more especially run-off are available, is the West River. In the "Report on the West River Survey of 1915" issued by Admiral Tan Hsia-heng, Director General of the Kwantung Conservancy Board, and prepared by Captain G. W. Olivecrona, the mean discharge at Wuchow for sixteen years was 8.750 m³ per second or 0.028 m³ per second per square kilometer. The highest flood during the period 1900-1915 occurred in 1915 and corresponded to 0.188 m³ per second per square kilometer and the minimum discharge observed was in 1907, giving a rate of 0.0025 m³ per second per square kilometer. These figures, which would give a possible flood discharge of 12000 m³ per second and a possible low water discharge of 159 m³ per second can, however, not be directly applied to the Min River, which has a catchment basin less than one-fifth of the West River and different rainfall conditions.

Roughly speaking the average yearly rainfall for the Min Basin is in the neighbourhood of 1500 millimeters, while for the West River the average is probably less than 1300 or 1200 millimeters. This would give a comparatively larger average run-off in the Min River; and further the smaller size and different character of the Min Basin make the flood and low water discharge—per unit of area—higher, respectively lower, than in the West River.

A measurement with floats was made at Chu Ki, some 8 geo. miles above Hua An, on 14th November 1917 at 9.00 a.m. (end of ebbing period at Foochow) given a total ebb discharge of 24,900 cubic feet per second (=710 m³ per second) at this place, corresponding, with due allowance for increase of drainage area, to $\frac{24600}{21800} \times 24,900 = 28,000$ cubic feet per second (795 m³ per second) at the mouth.

Tidal Influence.—The influence of the tide reaches at ordinary and low river discharge a point some 10-20 miles above the upper end of Nantai but the actual flood current is seldom observable above Huai-An. In time of strong freshets, no flood is observable at Nantai, ships do not swing and only a rise of the water level and a slackening of the current is observable. The tidal limit—the point where the flood ceases to run upwards—varies from Kushan Point to a place a few miles above Huai An, while the limit of influence extends higher up by damming up the water and to some slight extent by slackening the current. The tides are treated in detail in Section II.

Silt.—No silt-content measurements have been at my disposal or could be arranged during my short visit. At the time of my visit, November 1917, the water did not appear to contain even during spring tide more silt than found in the Whangpoo during a neap tide, say 0.0002 to 0.0001. The sediment found in the riverbed is fairly coarse and different from the Whangpoo and Yangtze silt both in character and size, and is, I judge, not greatly moved except by freshets and by extraordinary tidal currents, which produce high velocities, and through scour in concaves.

Widths and Depths of the River

The Outer Bar.—Approaching the Port of Foochow from the sea by the deeper North Branch, north of Wufu Island, the first obstacle to navigation for a ship of, say 24 feet draft, is the so-called Outer Bar. It is a widespread shallow formation—of the usual type—and has at least 14 feet at ordinary spring low water, and 28-30 feet at ordinary neap high water.

The Inner Bar.—The next obstacle is the Inner Bar, situated south of Sharp Peak Island and has only 11 feet at ordinary spring low water and 25-26 feet at ordinary neap high water.

The works required to improve the Inner Bar would be considerable and still more so in case of the Outer Bar, where the cost would run into many millions of taels.

The Middle Ground.—The northern projecting point of Wufu Island forms the Kinpai Pass, some 1,300 feet wide, and immediately above it the passage north of "Middle Ground" gives only 14 feet in the fairway at L.W.O.S.T. and about 26 ft. at H.W.O.N.T. although there is a deeper but very tortuous south passage.

Wufu Shoal.—Projecting from the Wufu Island this bank has some 16-20 feet at low water ordinary spring tides at its southern extremity (below Stevens Point) and 28 to 32 ft. at H.W.O.N.T.

Spiteful Island Passage.—Above the Mingan Pass the river widens out to a wide stretch. The shoals near the Spiteful Island limit the depth of the fairway to only 10 feet on the western side and to 14 feet on the eastern side at L.W.O.S.T. and about 21 to 25 ft. respectively at H.W.O.N.T.

North and South Branches.—The lower end of this wide reach forms the comparatively wide and deep Pagoda Anchorage. Immediately above the Anchorage is the lower junction of the North (Foochow) Branch and the South Branch of the main river (which enclose and form the Nantai Island, the upper end of which is here called Huai An T'ou).

Both branches are full of banks and crossings. In the Foochow Branch the maximum depths vary from 2½ to 6 feet in the fairway at low water. In the Southern Branch, which is not so frequented by navigation, several shallow places yield barely 1 foot at low water in the dry season. No sounding chart of the South Branch is available.

The rise of high water at ordinary neap tides above the ordinary low water of spring tides is 14 feet at the outer Bar, 11.6 ft. at Pagoda Anchorage and 6 ft. at Foochow varying proportionately at intermediate points.

It may here be remarked that the fairway now followed between Foochow and Kushan Point is only a few years old. Maps of 1902 and 1908 show the fairway at the time to follow the arm north of Green Island. This arm was later abandoned owing to the development of a crossing some 1 or 1½ feet shallower than the present fairway south of the Green Island.

The Bridge at Foochow obstructs navigation for everything but boats with removable masts and small launches. The depth at low water is about 3 feet in the actual opening under the

Bridge, but it is quite deep (20-30 feet) above and below. Between Foochow Bridge and the Hung Shan Bridge there is a crossing and some shoals with about 3 feet at low water. The channel from the Hung Shan Bridge up to Huai An is narrow and comparatively deep—generally 10 feet at low water.

The general character of the shoals and crossings is typical of a tidal river in mountainous country with sand as sediment. From Foochow down to Pagoda the riverbed consists everywhere of sand, except possibly at Pektao. It seems unlikely that the bed of the river to any great extent should consist of rock even at Pektao, but as a couple of rocks are visible in the centre of the river, it is unsafe to say to what extent there are any rock-shoals in the vicinity.

At and below Lim Po the stone cribs and stone junks opposite the Old Fort, which were sunk during the war of 1884, mainly in the middle and southern part of the river, are still in evidence in one or two places, with 3-4 feet depth of water on top of the stonework.

All the shoals and banks as well as the bed in the main river consists of fine, strident, sharp, white, reddish or yellowish sand. Finer mud is only found in the banks and foreshore of the narrower creeks or in branches with small velocities.

Present Training Works

At present the reach from Pagoda to Foochow shows a number of so-called bamboo-screens or "planted bamboos." These are partly made for fishing purposes but also in some cases intended to lead the current, and to produce scour or silting, as the case may be. They consist of bamboos, generally 1" to 1½" in diameter at the thicker end, and maximally 25-30 feet long, put in with the thicker end in the river-bed to a depth of 12 to 8 feet in several parallel rows which also are 12" to 8" distant from each other. A few holes are made in the lower end of the bamboo to allow the sand to enter in the hollow parts of the bamboo and thereby act as ballast. The cost of a 10 feet broad plantation of bamboos comes to about \$2.00 per linear foot.

The results of these works as training works if reasonably planned are excellent up to depths (at low water) of 6 or even 8 feet. They have protected eroding banks and proved effective in creating silting when required.

The largest and most recent were made by the Arsenal Authorities in the beginning of 1917, with considerable effect. They were made on the right bank from Pektao to Ah Chiu to divert the current towards the Arsenal frontage and to close the small lateral branch below An Chiu. These purposes were not fully attained as stronger and more extensive works would have been required, but good results were obtained at the cribs just below Pektao.

Future Development of the Port of Foochow

In analysing the river improvement problem, the first question to be considered in this: *What are the possibilities and probabilities for development of the port and trade of Foochow?*

Foochow has 624,000 inhabitants, is the capital of the province of Fukien (46,332 square statute miles, with a population estimated by different authors to from 8 to 22 million), and is situated at the mouth of the Min River Valley (24,600 square statute miles), which thus represents the larger part of the Province. At present only native small craft, junks, launches and small coastal steamers (150 tons) of 6-8-ft. draft come up to the port. The existence of Pagoda Anchorage has, however, given Foochow a certain rank as a seaport by serving as a harbour, for ships up to 27 feet draught.

In Fukien there are at present in existence two other larger commercial ports, Amoy (with Chang-chow-fu) and Santuao, the former with an excellent harbour and accommodation for ships. Evidently both Foochow and Amoy will each take its part in the ocean-borne trade of Fukien. Amoy has an excellent harbour proper with fair space and depths up to 36 feet at low water. Foochow, by virtue of its harbour at Pagoda Anchorage, is the only port for its large natural hinterland. The Pagoda Anchorage is not quite comparable with the Amoy Harbour. However in its present natural state, it can take in, at high water, ships drawing 24-25 feet any day of the year and 27 feet at springs. But at low water the Bar only yields 11 feet, so that the entrance of deeper

draft ships is dependent on the tide. The anchorage room is sufficient for considerable traffic. The natural conditions for building wharves and quays or at least bundings and landing facilities in connection with a railway on the northern bank are certainly not excellent, but offer no great difficulty.

Considering the existence of the ports of Hongkong and Canton in South China and Shanghai in Central China the chances that any one of the intermediate ports along the coast with their more limited hinterland, should rise to a trade port of the first order are not great, and these ports will probably have to be content to serve for coastal interport navigation and at most as ocean ports of the second or third order.

For ocean ports of the first magnitude drafts from 30 to 50 feet will soon be imperative. For second class ports, drafts of 24-30 feet is a desirability, if not a necessity, and thus—at least at high water—the port of Pagoda Anchorage has as far as depth is concerned the necessary qualifications for an ocean port of the second order.

In casting the horoscope for Foochow with Pagoda Anchorage as a harbour, one may say that it should well be able to hold its own in the future as a second or third class modern ocean port amongst the other ports on the Chinese coast from Shanghai to Hongkong.

One may ask whether it is possible to develop the river up to Foochow city and Nantai Bund to a depth of 20-24 feet at low water or more?

The reply is that it is always technically possible to produce this depth in the river but the question of harbour space would arise and the expenditure would with the present trade on Fukien be prohibitive so that such a scheme is on general grounds unsuitable and impracticable.

The question whether Pagoda Anchorage will ever be further equipped and developed as a harbour depends greatly on the general commercial and railway development of the Fukien Province. The mining possibilities in the interior do not appear to have been authoritatively investigated; the tea trade and the timber production may be promising, but in these cases, a considerable improvement and modernizing of the method is said to be urgently required. But in any case whether there will be a railway in the Min Valley or not and whether Pagoda Anchorage will be further developed as a port of call, for reloading and redistribution, or not, it is quite evident that there can hardly be any question of trying to make Foochow itself a port for the larger steamers.

One solution of the question of a port for the Min Valley would be a gradual transfer of the centre of trade—the city of Foochow—to Pagoda Anchorage or some other place with a favourable harbour in the lower Min or its estuary. But trade is very conservative in this respect and the vested interests of Foochow appear financially strong enough to afford an improvement of the Pagoda harbour provided it can be kept in communication with the city. Such a transfer therefore does not seem likely.

Under these circumstances comes the next question: *Is there any need for improvement of the river from Pagoda Anchorage to Foochow, and if so, what should be the aim of any desirable and economical scheme for such improvement?*

The problem of communication with which we are here confronted is to put Foochow in easy and direct commercial communication with its present and future ocean harbour (the Pagoda Anchorage). Several possibilities arise, roads, railways, tramways, waterways. Considering, however, the cost of a railway from Foochow to Pagoda, which would approach two million dollars, exclusive of wharves, one will soon find that the waterway is the best and chief means of carrying goods from Pagoda to Foochow and vice versa.

What then are the requirements of such a waterway from Foochow to Pagoda? As it cannot—within reasonable figures of cost—be a deep waterway, the shallowest efficient depth for so-called inland navigation will obviously be the cheapest. For canals and rivers the experience shows that it may vary from 6½ or 7 to 10 feet, depending on the natural conditions, but with preference for the higher depth. As in this case 10 feet are almost as easily obtainable as 7 feet in the low water channel, I consider 10 feet at low water to be the depth to be aimed at.

Considering, further, that at Foochow the neap rise is at least 6 feet, a low water depth of 10 feet would allow coast

steamers, requiring 16 feet of water, to proceed up to the town at high tide, which is a great convenience and economically important for re-distribution-transport-facilities. By thus having 10 feet at low water and at least 16 feet at all high waters (springs or neaps) Foochow will offer facilities of accommodating all coast traffic with steamers up to 16 feet draft, as well as all junks and regular traffic with tugs, lighters, etc. to and from larger ships at Pagoda Anchorage.

This is in itself a great improvement and fully justifies considerable expenditure. The main criterion on the commercial value of the improvement is of course its cost as compared with the benefit it confers. The benefit of a harbour-improvement is, however, so complex and varied and difficult to value in exact figures that I have desisted from any attempt in this case, where statistics are signally lacking.

A more practical, and at any rate, easier way of looking at the question of the practicability of harbour improvement is this: Compare the costs of the proposed improvement with the taxes which the interests directly concerned are willing (or able) to bear. This has been done in the following sections.

I have not here touched upon the possibilities of improving the river from Pagoda Anchorage to the sea for ocean-going vessels or from Foochow upwards for inland navigation. It may, however, safely be said that from a technical or economical point of view any eventual improvement of these other parts of the river is in no way detrimentally prejudiced by the regulation here proposed.

Proposed Improvement of the River

The aim of the improvement is to create a through navigable depth of 10 feet at ordinary low water over a width of at least 300 feet.

In laying down the Normal Lines "which demarcate the regulated channel," special consideration has been given to the interests of the Arsenal in fixing the deep water channel close to the Arsenal. Also the interests of the present riparian owners have been protected in providing for inlets and outlets to the tributaries and canals, by which the traffic from the villages and from the hinterland will have access to the deepwater channel.

One of the main features of the project lies in the fact of the problem being solved by training works only—without dredging, at least to any appreciable degree. Dredging would undoubtedly be valuable as assisting the process of creating the depth wanted. Dredging alone—without training works—need not be considered, as the results would in all probability not last over many freshets, and if the results of any dredging are to be made permanent, they would need to be assisted by permanent training works not much different from those proposed.

In any improvement of this kind—for example, in Europe—it is often found most economical to combine dredging and training. In this case dredging will prove very expensive. Any contractor in China will probably ask 40 to 50 dollars or more per 100 cubic yards, even if the transport length from the place of dredging to place of depositing is fairly short (i.e. within a couple of miles). The cost of acquiring even one single unit of efficient dredging plant (i.e., dredger, pump, 2 tugs and 3-5 barges) would at least amount to half a million dollars Mex. in ordinary times and will hardly be obtainable in China during the next few years at this figure. As the quantities to be removed by dredging are upwards of many millions, it is obviously better at least closely to investigate whether it cannot be made without it. And the result of my investigation is that it seems possible to expect good results of training works only.

It must, however, be stated that in any continued river improvement work, a dredging plant sooner or later always proves necessary, if for nothing else than in order to improve wharfage facilities and to satisfy the later demands for general improvement, which as a rule arise at a considerable rate as soon as the first improvement has been effected. But this—I should say—is a matter for a "continued" improvement.

The actual position of the works proposed is based on the Customs survey and map of 1916. In a river like the Min the banks and channels change continuously and therefore when once the work comes to be executed, a new survey will reveal considerable

changes and the position of the works will have to be changed accordingly. But the general nature and, probably, total amount of training works required is likely to remain approximately such as indicated by the 1916 survey.

Mr. Heidenstam gives a detailed description of suggested works to effect the improvement which he regards as necessary and possible.

Scheme for Administering and Financing the Work

As any improvement of the lower river to Foochow is a matter of importance not only to Foochow, its trade and interests, but also to the entire hinterland and province, it might be expected that the Provincial Authorities would contribute largely towards the work by funds from the Government Exchequer, whether provincial or central.

It seems, however, that Foochow is likely to be thrown mainly on its own resources and the funds for the work will probably have to be found to a large extent in a similar way to the method employed at the ports of Shanghai, Tientsin, Newchwang and Chefoo, in other words: the trade and shipping of the port will have to pay for any improvement desired. A contribution from the Provincial Government Authority is, however, much to be desired in order to establish the Governmental character of the undertaking. The above *desiderata* indicate an administration by a Public River and Harbour Improvement Board with representatives of

the Government Authority, say, the Governor of the Province, the Commissioner of Customs, one representative of the Chinese and one of the Foreign Chambers of Commerce.

This form of administration safeguards on the one hand the Chinese governmental rights, while it gives full guarantee to those who are being taxed for a control of expenditure, and for a voice in the administration.

The exact composition of such a public body is, of course, open to discussion, but on the point of its general suitability and adaptability for executing such a work, there can be no question.

A tax of 5 per cent. of the Maritime and Native Customs duties on the values of 1916 would yield nearly Tls. 38,000 yearly. Coupled with a Government grant of Tls. 12,000 yearly and say, a special tax on junks and regular Foochow (Nantai) steamers, giving Tls. 10,000 a yearly revenue of H.K. Tls. 60,000 or Mex. \$90,000 would be secured.

Many other combinations of taxes and sources of revenue can be investigated but it may at least be said that the trade and shipping of Foochow can well bear a tax, yielding H.K. Tls. 60,000 a year.

The income that may after completion of the works be derived from areas eventually silted up, dyked in or actually reclaimed will be considerable and should finally amount to many tens of thousands of dollars, but it is hardly wise to count in the early stages of the actual work on this income, which experience shows to be slow in coming in.

A Chinese Chemist's Shop

The Chinese retail drug trade still prospers in Shanghai, in spite of the adverse foreign influences a'l around. Although there are European, American, and Oriental doctors with modern scientific educations only too willing to be employed, the Chinese sticks to his time hallowed methods of suicide. When he is ill he goes to a doctor who knows nothing about either the illness or the body of his patient: and from the doctor he gets a prescription which he takes to a man who does not know how to make it up. After that, he recovers. If by some chance he is sent to a foreign hospital where his illness is correctly diagnosed and treated, he either escapes or dies as a protest.

Chinese retail drug stores are roughly divisible into two classes. Of these the more prosperous have no windows, but rejoice in a large blank wall, the happy emblem of a Chinese mind, with one or two characters flaming on it. Inside, in the feeble light which filters through the one small door, there are two counters at which the assistants dispense the drugs which have worked their ways in Chinese stomachs for the past three thousand years. The less wealthy have windows and doors like ordinary shops, and there is one of the dim religious light of their rich neighbors. But the element of superstition is there just the same, and the same ignorance is dispensed with the same inaccuracy.

The Chinese pharmacopeia is founded on ignorance and embodies the mistakes and misreadings of the centuries: at present it is interminable and unintelligible. Written in the styles, and with the expressions, of long past days, it is now in great part greek to the student. A man suffering from cold on the chest and wishing to be treated in exactly the same way as Wu Lai-tzu was treated in the days of Sung, because he likes Wu Lai-tzu's style, and because Wu Lai-tzu has left a sonnet which can be read backwards, forwards, sideways, and upside down, recording how he, Wu Lai-tzu, took his medicine, and two days afterwards was able to observe that it was beautiful to drink tea in the bamboo grove, or to watch the moon rise above the misty lake, with his accustomed pith and originality; this man might be in a little

quandary because critics are in two schools as to whether Wu took three ounces of dried toad's ears and two drams of calomel, or three ounces of prussic acid and two drams of fulminate of mercury. But he doesn't really care, because he is quite clear in his mind that one set of critics ought not to be allowed out of their establishment, and so goes to the nearest chemist with a light heart. And the chemist is in no difficulty either. He tosses little things like that off every day of the week.

The basis of most Chinese medicines is vegetable. Many of their tonics and syrups are comparatively simple stews of some of the commoner sorts of fruits, such as pears and plums. But to enhance their value in the eyes of the patient, and to keep the bills up, other ingredients are mixed with them. One such prescription may be translated somewhat as follows:—

"The prevailing bad weather has attacked the body; the food has remained in the stomach, and the body is hot and the stomach defective. The pulse is floating and slippery, and the tongue yellowish. The cure to be adopted is a cleansing of the stomach

Take— Wood-lice shells, 1 mace.

Elephant's teeth, 3 mace,

Orange peel, 1 mace

A red fungoid growth from the root of a tree, 3 mace

Bamboo leaf, 3 mace,

Bats' spines, 3 mace

Fragrant root (*Angelica refracta*), 2 mace.

Which sounds as though it ought to do it: the symptoms seem to be the same as those described in "The secrets of Alexis, containing remedies against divers diseases, wounds, and other accidents. London, printed by William Stansby for Richard Meighen and Thomas Jones, and to be sold at their shop without Temple Bar under St. Clements Church, 1615," under the following concise heading: "Another drink very good in case the patient have therewith any great doulour in his belly (as it often happeneth) by reason of exulceration and gnawing of the guts." But we are straying from China.

Chinese doctors do not have to pass any examination before they set up in practice. They are apprenticed to another doctor, and then in due time take the offensive themselves. Their success depends upon their own efforts, and, of course, the luck they have with their first cases. The Chinese as a people approach doctors with their own peculiar blend of complete scepticism and complete credulity. Readers of Macaulay will remember the wonderful description of the scene where the dying sceptic, who had himself dabbled deeply in chemistry, had loathsome drugs and wild remedies tried on him, and then, after one of his most characteristically cynical witticisms, took the communion of the Roman Catholic faith. So does the Chinese approach his doctors with doubt in his brain, but with a strong hereditary superstition in face of the unknown.

The sincerity of the Chinese belief in their medicines stands the sternest test, that of money. Chinese medical treatment is very dear, far dearer than foreign. It is impossible to describe within a short compass the complicated and infinitely differentiated niceties of Chinese medical practice. All that can be attempted is to give some idea of one small chemist's shop.

This one is open to the street. Outside hangs the usual shop signs, but there are none in English. Inside a counter is arranged like a bar, so that people can stand at the front and two ends. On one side the spare space is filled up by the presses in which some of the medicines are kept: at the other there is an alcove, in which there is an altar to the God of Healing, where incense burns in a small earth filled bronze vessel. On the walls above the furniture hang black enamelled boards with golden characters containing the usual sententious apothegms. At the back of the shop are shelves filled with blue and white porcelain jars. The larger ones have square pewter covers: these contain liquids, principally tonics. In the first there is a syrup of pears and other medicines which will ward off the approach of the feebleness of age. Next door is a distillation which will ensure the easy delivery of women. These liquids are all ladled out with the same iron spoon which robs the medicines of any sameness to a patient, for if the first dose be ladled out with the spoon which has just been used for stewed onions, and the second time when it has been used for a decoction of assafoetida, a pleasing variety ensues.

Above are smaller jars, with octagonal based caps. These contain seeds and plants of the more expensive kinds. In front of them are little snuff bottles filled with ready mixed powders. The drawers which run round two sides of the shop are filled with an odd assortment of cures. These small bones belonged to monkeys, and are now sold to mothers who wish to spare their daughters pain when their feet are being bound. The monkey bones are boiled and the child's feet are washed in the juice, which softens the bones of the foot and so reduces the pain while the bones are being gradually crushed by the process of binding. They are not very dear, being worth 80 cents an ounce.

In another drawer are some small dry leathery looking bags, which have a polished surface. One is split, and shows that the contents are a dusty brown powder. They are the gall bladders of bears, invaluable in the treatment of sore eyes. Bears having a limited supply of gall bladders, they are worth \$10 an ounce. They are said to come from Annam, but more probably come from Yunnan. Other medicines must be mixed with them, as they are too strong unadulterated.

The contents of a tiger's stomach, with the exception of the larger viscera, which have uses of their own, will cure those who can afford \$4 an ounce of any vomiting they may be troubled with, no matter its cause.

It would have interested Dr. Koch to know that consumption can be cured by the judicious use of otters' livers, mixed with certain herbs.

The horn of the rhinoceros is a boon to the wealthy, for it has a general curative effect on diseases and is a wonderful general tonic. Unfortunately there are not many rhinoceri, and they have small horns and few, and further show no willingness to part with what they have, so the price runs high: about \$20 an ounce. This can be taken for most any illness, and with other drugs acts like the bursting charge in a shell.

Snakes are not great contributors to man's health, though there is one snake, which is at its best in Chekiang province, which banishes rheumatism. The snakes are kept whole, the viscera

having been removed, but the bones of the body left intact and the meat of the ribs and skin allowed to dry. The bones of the head are removed completely. No one part is better than any other, and when one buys an ounce one takes one's chance as to what part one gets: it all depends how many people have been at the same snake before.

The chemists who prepare the medicines do not have to undergo any specific training. They are apprenticed young, and during their three years' apprenticeship they pick up the general run of the trade. As the drugs are not of any constant strength, and since no one knows what is the matter with the patient or what is the precise effect of the drug he is taking, small errors in compounding do not cause any inconvenience. The qualities most in request are willingness and *savoir faire*, and if a lad displays these he will, when his articles are out, become a fully fledged assistant, and in time may rise to a partnership or start on his own. The shops are not connected with the doctors, and do not pay the latter any percentage on their prescriptions. A large trade is done in ready prepared medicines, and advice is given free to those who are too poor to afford a doctor. The small plasters so commonly used on the temples to reduce headache are very cheap, a dollar buying about 500, and there are a large number of packets of medicines of various kinds waiting purchasers, which take the place of our pills, blood mixtures, and cough tonics.

GERALD KING.

Does Forestry Control Floods?

[BY AN ENGINEERING CORRESPONDENT.]

An interesting article on the relation of Forests to Flood control from the pen of a Professor of Forestry at Nanking University was produced in the last issue of the FAR EASTERN REVIEW. In this he states that afforestation "cannot but exert an enormous influence in the control of floods," and adduces a considerable amount of varied data in favor of this opinion. The author makes quite a plausible case, but it should be observed that river-engineers do not in general attach quite so much importance to afforestation as a *method of flood control* as is suggested in the article. Any method of storing the rainfall is, of course, of great importance in flood control, but it should be observed that the quantity of water which a forest can hold is definitely limited and as soon as the forest is fully charged with water, it has little or no effect on the immediate run-off. One may with advantage compare the forest with a sponge under the water tap. The capacity of a forest in retaining water is a question which we have never seen fully discussed. It doubtless depends on the thickness of the surface soil and the total living leaf area above unit area of the soil, but it is difficult to conceive that the storage can correspond to a very great equivalent depth of water.

Surface evaporation is doubtless increased by the leaf area and the transpiration, which is part of the life process of the plant and adds to the total which is thus directly returned to the atmosphere, but on the other hand the air in a forest rapidly rises in humidity so that the evaporation is checked and it is doubtful whether this factor is really potent in the latter and, from the flood point of view, most dangerous period of the rainy season.

The author of the article is on sounder ground in the matter of silt, although one may certainly question his general statement that soil brought down is injurious to the fields. It is difficult to conceive how the fields themselves could come into existence without soil so brought down. The velocities in mountain streams are not annulled by forests, and the mere fact that tree covered hills do erode shows that the cure is only partial.

In comparing one river with another caution must be taken to consider the sizes of the watershed, the climate as determined by latitude or proximity to the sea, etc., and it is doubtful if the very sweeping generalization on this point which is suggested in this article holds good. The evidence for the direct modification of climate by afforestation is as yet most incomplete.

Afforestation is most certainly a primary national interest as such, viz., in respect to supply of timber and fuel. It is also undoubtedly a mitigator of floods but to an extent which scarcely if at all exceeds the degree of uncertainty in the factors which the river engineer must always allow for in his calculations. In these circumstances it would appear that while every river engineer would cordially welcome afforestation as a valuable national undertaking and insist upon it as a necessary and helpful agent in the flood question, there is some lack of proportion in asserting that there must be direct co-operation between the forester and the river engineer for flood control purposes. The former's work is of the highest value in itself, apart from the incidental and fractional benefit to rivers, and must always be based on considerations—economical and biological—apart from those of river control. Considered merely as an economical method of storing water it is of a value which is insufficient seriously to modify the immediate engineering works that can be proposed to control the floods of any larger watershed.

The river engineer needs to consider the climatic and at a high degree of permanence by direct methods. In the case of topographical conditions as they actually are and he must aim of the principal Chinese rivers, the watersheds are so large that many years must elapse before any benefit of afforestation in regard to flood control can be apparent and even then it may be small; for example, the colossal result of afforesting, say, 20 per cent. of any of the larger watersheds in China—effected in say 100 years—can scarcely be conceived as producing any substantial abatement in the maximum run-off of the main stream.

Demolition of a German Monument at Peking

The beautiful three-arched pailou which was erected seventeen years ago in Peking at the behest of the German Government has now been dismantled and the marble slabs used in its construction are to be employed in the erection of a monument in the Central Park of Peking to commemorate the victory of Right over Might. This is as it should be, but it is well to bear in mind that had not the inspiration come from foreigners it is doubtful if the Chinese Government would have moved in the matter at all.

Article II of the Final Protocol made between China and the Powers in 1901 states:—

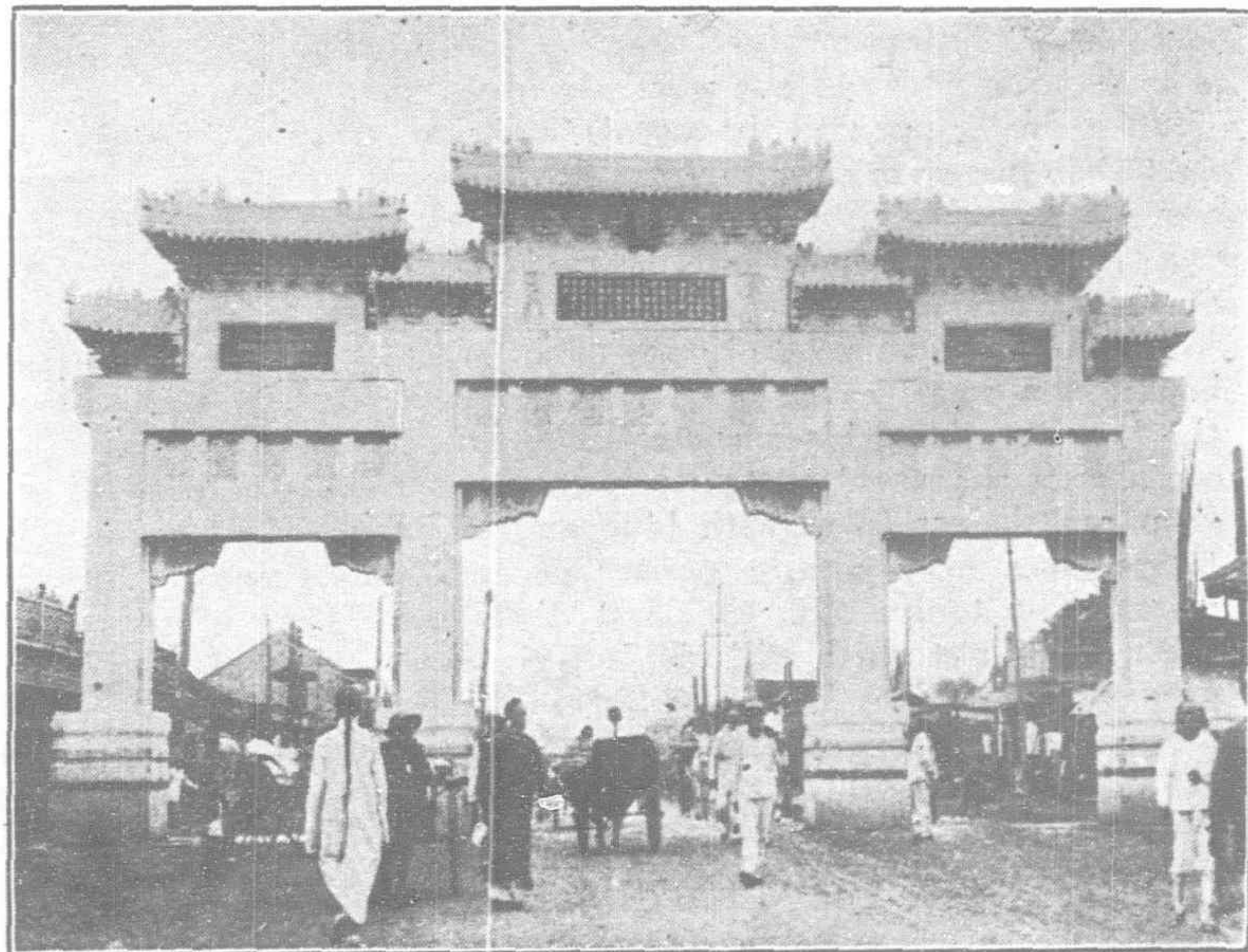
The Chinese Government has stated that it will erect on the spot of the assassination of H.E. the late Baron von Ketteler, a commemorative monument worthy of the rank of the deceased, and bearing an inscription in the Latin, German and Chinese languages, which shall express the regrets of H.M. the Emperor of China for the murder committed.

The Chinese Plenipotentiaries have informed H.E. the German Plenipotentiary in a letter dated 22nd of July last that an arch the whole width of the street would be erected on the said spot, and that work on it had begun on the 25th of June last.

Accordingly a solidly constructed three span pailou was reared across the Hatamen close to the entrance to Tsungpu Hutung, where the German Minister, Baron von Ketteler, met his death eighteen years ago at the hands of Boxer madmen

Its erection cost Tls. 400,000, a very considerable sum indeed in these days.

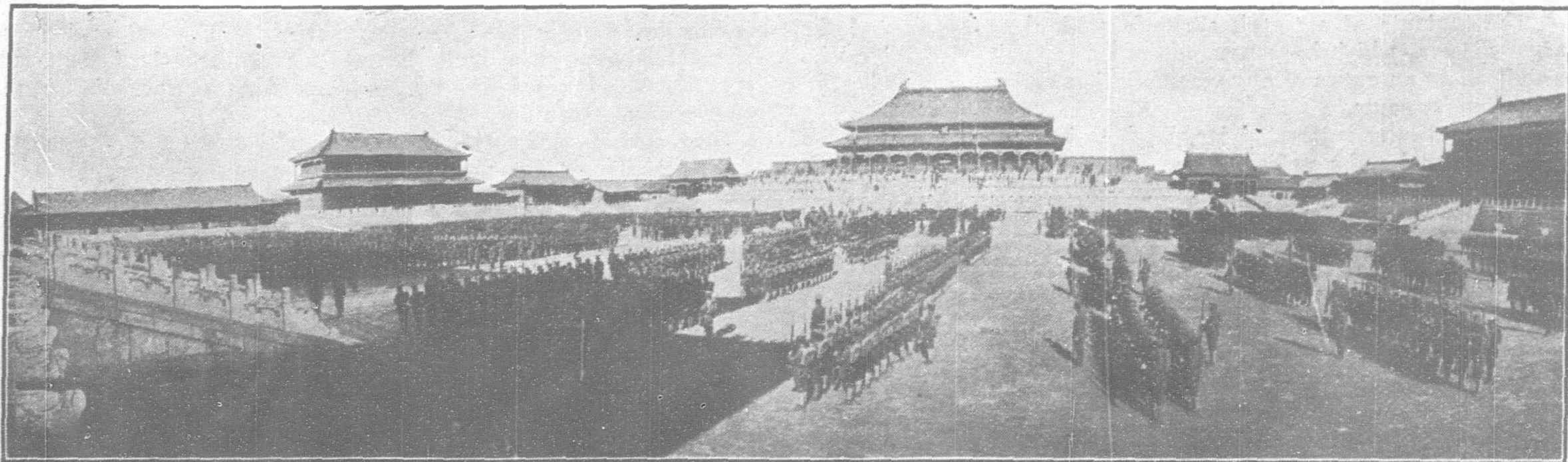
After China had declared war against Germany suggestions were made that the memorial which many regarded as a national disgrace should be demolished, though more moderate counsels advocated erasure of the offending inscriptions and replacing them with inscriptions recording the dates of China's severance of diplomatic relations with and declaration of war against Germany. But nothing was attempted. This passivity was due to the universal belief in China that Germany was invincible and that it would be unwise to irritate the Kaiser further than had already been done. However when the news of the signing of the armistice was received in Peking long suppressed feelings found expression. To many people of allied nations the monument representative of German might in the Hatamen was exceedingly offensive, and consequently an enthusiastic but badly directed



THE KETTELER MONUMENT, PEKING

attack was made on the pailou at midnight on November 12. The Chinese police looked on sympathically, indifferent to the irregularity, as several uniformed foreigners hacked and defaced the structure. Little success was met with owing to the massiveness of the marble, and the attackers desisted in the early hours of the morning. Next afternoon the attempt was renewed but again without success. Then the Chinese Government took the matter in hand. Scaffolding was erected and the demolition was carried out in a proper manner.

Enlightened Chinese disapproved at first of the destruction of the monument which they regarded as a permanent record of the madness permitted by a dynasty which has gone and as such served to teach a useful lesson. Now that it is intended to use the stone to erect a war memorial in the Central Park that disappointment seems to have been removed. At anyrate the proposed action seems now to meet with general approval.



FOREIGN AND CHINESE TROOPS ON PARADE IN THE FORBIDDEN CITY, PEKING, WHEN CHINA CELEBRATED THE ALLIED VICTORY OVER THE GERMANS.

The Human Cab Horse of China

What it Costs the North China Rickshaw Puller to Equip Himself to Eke out an Existence

*All values in this article are expressed in silver currency. See back of contents page.

The rickshaw, it is said, was invented by a missionary in Japan, some forty or fifty years ago. From Japan the idea spread to China, India, the Straits, and South Africa, and has had important consequences, since it 1918 it was estimated that there were over a million men employed in making, repairing, or pulling rickshaws. Whether the invention has benefited humanity may be doubted, but it has certainly provided large numbers with an occupation, however hard, ill paid, and unhealthy.

In North China, no one who can get apprenticed to a trade or find regular employment will pull a rickshaw. But there are large numbers, who, when the time comes for them to shift for themselves, have no other equipment or introduction to life than a pair of broad shoulders, and for these the first thing is to fill the stomach.

My rickshaw coolie began at the age of sixteen. Thsoe were the days of wooden rickshaws with steel-tyred wheels which were heavy to pull. Two men shared one, one man pulling and the other pushing, the work being equally divided. The hire was twenty cents a day, and though that is less than is paid now, two men had to live out of each vehicle, and it was slower and heavier to work. Custom was not so good, for the Chinese had not got accustomed to the new means of transport and there were not many foreigners in Peking. About 1908 the rubber-tyred rickshaw was introduced and was a great improvement. It was better designed all round, for it was easier for the passenger to get in and out, more comfortable riding, and faster and lighter to pull. The Chinese took to them at once, and the demand soon exceeded the supply, with the result that the hire rate for the twenty-four hours rose to 75 cents. The coolie got this back easily, as double fares were always paid. Since then they have driven the older type off the market, and, production becoming large their price has fallen. At present in Peking the coolie pays 40 cents hire for the 24 hours. The rickshaw is licensed but the coolie is not, the license fee being paid by the proprietors of the vehicle.

Spring and autumn are the best months for the coolie. In winter the cold keeps everyone at home who can avoid going out, and in summer the heat and dust have a like effect. Globe trotters are the best fares, because they usually make long journeys with stops outside temples and shops, and pay generous fares. The worst passengers are old Chinese ladies and drunk foreigners. The old ladies have reduced the science of living to a fine art, and rickshaws fares to fine proportions: any demand for more is sure to be met by a storm more acrid and biting than any of those which sweep across Peking in February and March. The drunkard is shunned, unless the coolie has not earned enough that day, for they are seldom generous and often violent, and given to smashing the rickshaw when the coolie evades their assaults.

The pickings of a rickshaw coolie are confined to the uncertain generosity of his fares and the occasions on which he takes foreigners to shops. Then they receive a percentage of the purchase money. In theory, this is fixed at ten per cent., but in practice it is some lesser figure arrived at by dispute. If the foreigner speaks Chinese or if there is a guide with him it is not given, and if the visit is not the first it is much reduced. The largest commission my coolie had ever had was \$30, when he took an American to a curio shop where he bought largely. If there are several rickshaws in the party the money is divided equally among them.

Accidents to the wheels and tyres are paid for by the hiring company, while the coolie pays for those to the bodywork and hood unless he can get the party causing the accident to do so.

The occupation is very unhealthy. In summer he has to run in the heat, and when his clothes are wet through he may be miles from a change so that they dry on him, and since he cannot leave his rickshaw he is at the mercy of every rain storm. In winter he has to loiter about in the bitterest cold, and then run until he is wet with perspiration, after which he has to loiter in the cold again while his clothes slowly dry. These conditions account only too easily for the high percentage of coolies who fall victims to lung diseases, usually consumption. Few live to pull a rickshaw after they have turned forty. If by then they have not secured some other employment, their health will soon make other employment unnecessary.

On an average the coolie feeds three times a day, and his food costs him thirty cents. If he has a home he lives there, but few are married and residents of the place do not let their sons pull rickshaws if they can possibly help it, so the majority live in special inns kept for them. For sixty cents a month they have a right to a place on the raised dais, heated from beneath, on which the Northern Chinese sleep all winter. Nothing else is provided: he must bring his own bedding, but the innkeepers guarantee its safety during the coolie's absence. After food and lodging, clothes are the most important item. The usual summer outfit consists of a coat, costing from 60 cents, a pair of trousers, costing from 80 cents, and a pair of socks and shoes. Socks are a refinement rendered necessary by police regulations, and cost about 40 cents a pair. The thin Chinese shoe, with its sole of wafer-like thinness, is ill-designed footwear for a man engaged in heavy work like pulling a rickshaw but no substitute has yet been made at a low enough cost to take their place. The present article costs about 80 cents and lasts only a fortnight in average weather. The coat and trousers must be in duplicate as they get so soaked with perspiration that they must be washed every day, which means that they soon wear out. Expenses for one of the summer months are therefore:—

Hire of rickshaw	...	...	...	...	...	...	\$12.00
Food	...	...	...	...	...	...	9.00
2 coats	...	...	...	...	...	...	1.70
2 trousers	...	...	...	...	...	...	1.30
2 pairs socks	...	...	...	...	...	...	0.80
2 pairs shoes	...	...	...	...	...	...	1.60
Lodging, and depreciation on bedding	...	...	...	...	...	...	1.00
Total	...	...	...	...	...	...	\$28.00

He must, therefore, make about \$1 a day, every day of the month, to make both ends meet, without making any allowance for sickness, pleasures, help to relatives (more frequently demanded and given in the East than in the West) or provision for setting up a home of his own. And in winter things are worse. Leaving food at the same figure, although there is need for more and better food during the intense cold, the general increase is made up as follows:—

Rickshaw hire	...	...	...	...	...	...	\$12.00
Food	...	...	...	...	...	...	9.00
Double trousers	...	...	...	...	...	...	3.00
Double socks	...	...	...	...	...	...	1.00
Shoes	...	...	...	...	...	...	1.60
Small wadded coat worn next to skin	...	...	...	...	...	...	3.00
Outer wadded coat	...	...	...	...	...	...	4.00
Lodging, and depreciation on bedding	...	...	...	...	...	...	1.00
Miscellaneous	...	...	...	...	...	...	1.00
Total	...	...	...	...	...	...	\$35.60

All these expenses are not, of course, recurrent. The outer wadded coat lasts more than one month, but the inner one should, if possible, be one of a pair, to enable the wearer to change when he is hot and wet. The oil for the lamp has to be supplied by the coolie, as do the small fur hand protectors attached to the shafts. I believe \$34 to be a fair average. To sum up, the life is a hard one, and foreigners to whom ten cents is not of much importance are doing good when they pay well: they are not employing millionaires in disguise, as some seem to assume. Were they to pull a rickshaw for a week they would realize that the man who pays well is not regarded as a prey to be plucked, but as a beneficent Deity: and to be regarded as a deity of any sort on these terms seems worth the money.

GERALD KING.

The First Agricultural Campaign in China

The first agricultural campaign in China was inaugurated by the Peking-Hankow Railway early last September when Dr. C. C. Wang, Managing Director of the Railway, organized a special staff to give lectures on agricultural problems along the whole line of his railway. Mr. Y. H. Tong, M.S.A., Cornell University, 1908, now Director of the Central Agriculture Experimental Station of Peking, was in charge of the campaign, with assistants from the Ministry of Agriculture and Commerce, and a band from the Poor Children's Home. A train was specially fitted out for the purpose, with demonstration cars for exhibition of agricultural products, seeds, implements, pictures and literature, all of which were to be shown freely to the farmers and some of them were to be distributed to the people without charge.

The train was despatched from Peking on September 13, when Dr. Wang gave a farewell dinner to the lecturing staff in the Railway Restaurant at Chienmen, to which Mr. Yeh Kung-cho, Vice-Minister of Communications, Mr. Chiang, Vice-Minister of Agriculture and Commerce, and a number of Departmental chiefs from both the Ministry of Communications and the Railway were also invited.

The train passed through all the stations of the Peking-Hankow Railway, stopping over a day or two at each of the 36 large ones. The train was unusually fortunate in having splendid weather throughout the tour. At every one of the stations where it stopped, it was heartily welcomed by all classes of people living in the locality: the officials, the gentry, and the farmers. A suitable place for lecturing was arranged beforehand at each stop, and the lectures on both general agricultural problems and on questions of special interest to the farmers were given. Great enthusiasm was unusually shown by the farmers, who never failed to ask all kinds of questions concerning their particular difficulties in farming.

Besides lecturing and answering inquiries, Mr. Tong and his assistants lost no opportunity in getting their audience interested in agricultural questions through other means. They took the people into the exhibition cars and also demonstrated in the field the use of improved instruments. They showed to the farmers why the new method is better, how the new method can be employed and where the new instruments may be secured. Pamphlets written in the simplest language possible were distributed in large quantities at each place. Seeds of many kinds were also given free to the farmers for them to make experiments with next spring. It was clearly shown that the farmers very earnestly desire to make improvements on their land, although they did not know how.

In addition to all of this, whenever he had any odd hours to spare before the train left for the next station, Mr. Tong went out to the field to make a close investigation of the farming conditions of the locality, with the hope that the railway may be thoroughly acquainted with the condition of the land along

its line, so that it may be able to give assistance and advice to the farmers according to their particular needs from time to time.

The campaign lasted fully a month and a half, and the train stopped over at 36 large stations; the number of attendants at these lectures averaged about 400 at each station, making a total of nearly 15,000 for all. Of these, the majority helped themselves freely to the sample seeds and pamphlets, and many of them definitely decided and promised to make experiments in the way they were taught, at the first opportunity next year. Another point of interest is that at many places, many women also came out to hear the lectures. They seemed to be just as much interested as the men.

The authorities of the Peking-Hankow Railway are perfectly satisfied with the results of the campaign, and judging from the results just described, it has adequately fulfilled its purposes, namely, to arouse general interest among the people in agricultural reforms, and to encourage agricultural development in order to increase the traffic on the railway. It is the hope of the railway that it may have the opportunity in the future to repeat and extend its first experiment which has already proved successful. It is also learned that other railways are likely to conduct similar campaigns.

Iron-Ore Deposits in the Celebes

The *Algemeen Handelsblad*, of Amsterdam, recently reprinted an article from the *Soerabaya (Java) Handelsblad* regarding the results of the investigation by mining engineers of the iron ore deposits recently discovered in the Malili district on the island of Celebes. The report says:

"Better natural conditions can hardly be found anywhere else. A river of clear water, filtered in a sense by the lakes of Mantana, Makalona, and Taroeti, owing to the peculiar formation of the hinterland, passes by Beraoe and flows from the ore fields toward the coast so that transportation of materials will present no difficulties. Water is abundant, and electric power can easily be developed; and the Toradjas are good workers, energetic, and strong.

"For the present the investigation will be confined to three principal points of exploitation—Laronne, Sarocako and Waroe (Mea)—although ore is found in many other places.

"It was only in the last six or seven months that the work could be carried on in earnest. At the beginning, after a superficial examination, a report was submitted to the Government estimating the quantity of available ore at 350,000,000 tons. Further investigations were made and about the middle of March last the commission announced that the district in question contained at least a billion tons of so-called lateritic iron ore. The latter differs from other sorts of iron ore by its high contents of nickel and chrome which make it the more valuable as it can be used in the production of special sorts of steel.

"Digging is hardly necessary here, as the ore is found on an enormous plain, so to say on the ground, and along the slope of the hills, in layers of a thickness of 14 to 15 meters (46 to 49 feet). The location could not be more favorable, particularly as transportation along the Malili River will be a very simple matter. It is not necessary to wait for the construction of smelting furnaces. The ore may be taken as it is, loaded on ships and sent to New York, and it will bring enough money to pay off the war loans of both the Netherlands and the Netherlands East Indies.

"The engineers were charged originally with the duty of investigating the iron ore deposits only. By a lucky accident they discovered ore unusually rich in nickel contents.

"In New Caledonia the country that supplies the world with nickel, 7 per cent. is the maximum nickel contents of the ore; in the Malili district this percentage is not less than 25. When it is taken into consideration that these nickel ores were found at the very beginning of the exploration in paying quantities on an area of 1,200 to 1,500 square miles; that the ore-bearing fields are as large as those of New Caledonia; that a ton of ore holding 7 per cent. of nickel commanded a price of 260 florins (\$104.52) before the war, and would now bring about three times as much; and that in a good year (1908) New Caledonia would produce 108,000 tons of ore—a simple calculation will show that a small part of the island of Celebes is likely to yield billions."

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Mining Activity in China

The high price and great demand for metals caused by war requirements during recent years not only brought China into the market as a producer of wolfram and a few other metals not previously mined to any extent but inspired numerous enterprising Chinese to devote considerable attention to mining possibilities in all parts of the country. Prospecting parties have been despatched throughout accessible provinces and Chinese who have studied mining abroad have been engaged by interested parties to go as far afield as the almost inaccessible province of Kansu looking for prospects. Another expedition is now on the way there.

This activity has been productive of many hopes, if not the actual discovery of valuable deposits, if the demands for prospecting licenses and mining rights which have been received in the Mining Department of the Ministry of Commerce, Agriculture and Industry at Peking, constitute a criterion. Recent reports show that an average of from forty to fifty applications from Chinese to prospect or develop mines of all sorts in nearly every province come into the Ministry every month. During some periods applications are received every day. The applicants may be divided into several classes such as local miners, merchants, syndicates, retired officials and active officials, and a situation is developing very reminiscent of early mining conditions in other countries. Every representative of foreign financial firms or syndicates established in Peking and other large cities in China are constantly being urged by Chinese, loaded down with samples, questionable and otherwise, and armed with picturesque permits, rights, or deeds of ownership, to finance one kind of mining enterprise or another. Some of the properties are undoubtedly valuable, many are believed by those interested in them to be valuable, and numbers are entirely worthless. Many Chinese actually possess the knowledge requisite to determine mineral values, others are sublimely ignorant, but the majority believe that the foreigner is thirsting to lend money on any prospect without inquiry, security or safeguards; and in

many cases the pathetic belief exists in the minds of some who really have nothing to show but ordinary quartz or stone that somehow or other the foreigner, if his attention can only be secured, possesses the alchemy necessary to extract precious metal from even the commonest of burnt brick.

The great cry among all sections of the newly developing mining fraternity is, of course, for money—and for foreign money. That is common the world over. The wealthy Chinese as a class are as yet difficult to tempt into a mining deal. Firstly, they know little or nothing about it; secondly, they invariably know of friends or others who have financed holes in the ground and lost whatever they have invested in the digging; and, thirdly, and most important, they are afraid to invest capital in anything likely to develop into a rich proposition because of the temptation it holds out to unscrupulous officials to squeeze it to death with taxation or filch it from its rightful owners by divers and devious methods. Many of the mines which have been developed by the Chinese themselves have been closed down as a result of ignorance and inexperience in development and working, nepotism, dishonesty, or by over-taxation on the part of vampirish officials; and, as in other lands, even with the removal of these features many more are going to pay heavily for experience and knowledge of the worth of what the bowels of the earth contain before China's mineral deposits are being developed on a proper basis. The increasing activity in mining that is being displayed throughout the country should compel the Government to give immediate attention to the necessity of remodelling the mining laws so that work may be carried on with security, with borrowed foreign money if necessary, and with proper safeguards to investors. Above all provision is necessary for the unobstructed operation of mining areas with foreign capital under foreign control and management. No proper development of the mineral resources of this country is possible until foreign experience and financial help are obtained, and they cannot be obtained without proper inducements and laws which will afford adequate protection and permit the investor to determine how his money shall be spent. China's future depends upon sensible legislation with regard to mining as well as every other avenue for the employment of capital in economic development. The wealth of every great nation comes primarily from the earth, and other Governments have provided the inducements for its extraction, but unhappily the Chinese have not yet awakened to that fact, and that is what they have to be taught. We believe, however, that there are better prospects now for the establishment of a stable government than there have been for many years, but it is necessary that the Allied nations sympathetic with this country should in no hesitating and uncertain manner give it a stout measure of assistance and lend it a guiding hand to win to the road leading to national wealth and greatness. On her part China must determine absolutely to jettison childish ideas, unwarranted prejudices, unnecessary restrictions, and unprofitable obstruction. If she does this her future is assured, and it is encouraging to see signs that she is realizing the folly of old notions and is gradually emerging from the hide-bound conservatism which has for so long enthralled her and which has rendered her anything but a helpful factor in world development and progress.

Generals who want Industrial and other Reforms

There are exceptions to every rule. In China the Tuchuns are cursed in collective terms as a useless body of military governors who utilize the man power over whom they have managed to secure control to the detriment of the people and the State and to the aggrandisement of themselves. Not all Tuchuns are bad. There are one or two who stand out as thoughtful men realizing the folly of existing conditions and ready enough to have them terminated. Among such are General Li Shun, the Military Governor of Kiangsu Province, with headquarters at Nanking; and General Yen Hsi-shan, the Tuchun and Civil Governor of Shansi Province, with head-

quarters at Taiyuanfu. There are possibly one or two others who in time will come to light. General Li Shun has for some time been the outstanding figure among the military men of this distracted country because he has firmly adhered to the principle that it is suicidal for the Chinese to fight themselves.

For the past couple of years he has been a strong advocate of peace within China's own borders and a campaign on behalf of the Allies if the craving of militarists for bloodshed must really be satiated and the zeal for active combat must effervesce. His appeals for assistance to the Allies fell upon deaf ears, as also did his pleas for the termination of the criminal folly proceeding in his own country. His steadfast stand, however, was primarily responsible for the ultimate breakdown of the plans of the northern Tuchuns to suppress the South by force, and to him must be given the credit for any peace arrangements that may now ensue. Situated as he has been in one of the most important strategical positions in the country—astride the Yangtze at Nanking—he has been able to wield strong passive influence on events, and on the occasion when the Northern band of militarists endeavored to send Fengtien troops to Nanking to threaten him he promptly exhibited an activity which constrained them to think twice about their intentions. The Fengtien troops, which were paid out of funds provided to prepare a force for participation with the Allies—but which participation never materialised—found it expedient to return up the railway towards Tientsin whence they came, and no further attempt was made to interfere with the Yangtze General. His policy is to abolish Tuchun rule, reorganize the military establishment in China into a national force, disband a horde of useless so-called soldiers, and establish a stable government on modern lines—a government pledged to reorganize finances, promote the welfare of the people, build up industries, extend opportunities for trade and commerce, and in general take the very necessary steps that must be taken to place China upon the plane she should occupy in the family of large and progressive nations.

Now we have definite indications that General Yen, of Shansi—who has the distinction of being the only Military Governor in China who has uninterruptedly held his post since 1911, the time of the revolution which effected the establishment of the Republic—is turning his attention to better things than the promotion of general disturbance. In fact he has always exhibited the possession of a sanity that has signalled him out as one who recognizes the vital need of ordered government, and if he has not managed to influence such a state throughout the country he at least has been able to secure it in his own province. That is more than can be said of several other Tuchuns responsible for the deplorable state of chaos into which the country has drifted. General Yen was one of those who attended the recent conference in Peking but so far as we can learn he has not subscribed to any of the foolhardy plans of his fellow Tuchuns. He has in his favor his peaceful rule since the establishment of the Republic, and now he has set an example that all of his colleagues might well follow. On December 12 the Ministry of Commerce, Industry and Agriculture at Peking received a despatch from him stating that on his return from Peking he took the opportunity to make a tour of his province with a view to acquainting himself further with local conditions and improving matters along industrial lines.

He reported that he found it is quite feasible to improve the irrigation system north of Yenmenkuang, expand the possibilities of cattle raising there, and promote the growing of cotton to the south of that place, and urged strongly that steps be taken to develop opportunities along these lines. He enclosed a memorandum giving detailed plans for carrying out the projects, and as a result the Ministry has appointed a technical expert to go to Shansi and follow up the work initiated by the Governor with a view to inaugurating measures to consummate the recommendations made. It is quite possible that General Yen's brother Tuchuns will be quite annoyed at this untoward exhibition of crass ignorance of the duties of Tuchuns and lack of appreciation of their ethical standards, but it will inspire a lot of people who have come to believe that all Tuchuns are bad and that there is no hope for this distraught country. It indicates one thing, and that is that there are among the military some men who will, if given the opportunity, assist to put the army on a proper footing and work for reforms that will enable China to look the rest of the progressive world in the face.

Industrial Promotion in China

Because we publish an article in another part of this issue denouncing the provincial Chinese officials who through greed or ignorance contrive to prevent the logical development of legitimate industries we do not wish it to be understood that all officials are cast in the same mould. Years ago most officials were averse to the introduction of modern methods, as were the people, solely because they did not understand them. Superstition more than anything else actuated them to opposition then. They could not accept as part of their scheme of things a great machine belching fire and steam and smoke, or a house running on wheels without any visible means of propulsion, or wires stringing through the country over which unseen messages were constantly flashing. They had been used to animal or man traction and to couriers for messages, and it is quite understandable that their superstitious minds were susceptible to, and easily imposed upon by, the insidious teachings of the geomancers who owe their livelihood to their ability to keep superstition popular. This class fought against modern innovations genuinely believing that their introduction would so enrage the spirits and the dragons—who have to be propitiated unremittingly as it is to keep them in good humor—that disaster and afflictions would descend upon all who failed to prevent the incursion of disturbing elements.

The Chinese, being inherently a sensible people, ultimately saw the benefit of steam engines, railways, telegraphs, electrical devices, etc., and naturally enough the geomancer received his quietus and the dread of mechanical contrivances departed in all the coastal regions throughout the great plain, and in fact in all places except the very remote and almost inaccessible sections of the country. Evidence of this is given by the safe operation in such places as Mongolia of motor cars, and of the demand in all quarters for railways, combined with the occasional erection and operation of machinery in very distant provinces.

But though superstition has been superseded by sense industrial development is hampered by officials who adhere to the commonly accepted idea that the mandarin is entitled to squeeze large sums from government revenues and impose taxes *ad lib* on any developing industry, trade, or commerce that manages to get its head up within the limits of their jurisdiction. These are the men who are a menace to China, who stifle legitimate efforts to raise the standard of living, and who are responsible for the oppression and the poverty that exists in every province in the country. Mandate after mandate has emanated from high quarters in Peking dilating upon the value of industrial development, but these when they reach the provinces are interpreted as being cunning official contrivances designed by a sympathetic and paternal government to lure foolish people into investment in industries merely to provide one more opportunity for the provincial official to further fatten himself financially. And when a mandate issues from the Capital, as one did quite recently, denouncing the provincial officials for such squeezing it is smilingly accepted and construed as camouflage to throw dust in the eyes of the people and mollify heartless critics.

The time has come, however, when the Central Government, if it is worthy of its name, should completely wipe out all restrictions that are imposed upon the enterprising, and to inspire the Government to such action everyone in a position to do so should use every effort to bring home to it the iniquity of the existing tolerated custom; and the representatives of various foreign Governments in Peking should constantly press not only for the abolition of such obstructions to commerce as *likin* and similar taxes, but also for the unshackling of existing industries, the prevention of impositions upon new concerns and the punishment of officials who make it a practice of obstructing legitimate enterprises and taxing them out of existence. This criminally short-sighted, reckless, and senseless custom is the curse of China, and is at the bottom of the backwardness of industrial development; it keeps the people poor but enables them to be prolific, and renders it impossible for the nation to rise in wealth or prestige. The philosophers of the land look to classical compounds properly administered to work the necessary wonders, but utilitarians know that the only possible curative is a vigorous

cold-blooded *coup de pied* properly administered. What is wanted is the man with the big enough brain, heart, and boot to carry out the requisite operation.

There are, however, many officials who know what is at fault in this country and who strive against the most discouraging conditions to do helpful work. Note the other article in this issue on the educative campaign being carried on by the Managing Director of the Peking-Hankow Railway—Dr. C. C. Wang; the efforts started by Mr. Yih Kung-cho, when he was vice-Minister of Communications, to open up Inner Mongolia by motor services, and construct roads elsewhere; the excellent beginnings made by Mr. Chow Tze-chi, when a Cabinet Minister, in the establishment of a forestry service, a department to better the production of China tea, the erection of mills, and the inauguration of other enterprises; the important municipal improvements effected by Mr. Chu Chih-chen at Peking when Minister of the Interior; the splendid industrial work carried out by Mr. Chang Chien—and no one official has done more than he; the cotton mills, and other industries encouraged by Mr. Chow Hsueh-chi, one-time Minister of Finance; and the work of many others who strive against great odds to establish factories and better living conditions. The difficulty confronting these men is that they have not the power, or had not the power when in office, to overturn "old custom." A decided course of action must be laid down by patriotic men, and the chief plank should be to abolish the squeezing official at all costs. The hopeful feature of the situation is that the men who realize the great value of industrial development are likely very soon to be able to exert definite influence, and to this end the Allies should do their best to render assistance.

After the above was written another Mandate was issued by the President exhorting high officials to "educate the people and provide them with means of livelihood." Allusion was made to the good work done by Tuchun Yen, in Shansi Province, and the suppression of brigandage in Fengtien and Honan Provinces. "The good results thus produced are evident," added the President, and after urging that none but good officials be appointed and that persons should be "selected for the localities and not localities for the persons," he ordered that "the virtuous and competent should be duly promoted and rewarded and the corrupt and incompetent should be singled out and duly punished."

A Use for Chinese Soldiers

The suggestion in our last issue as to the utilization of Chinese soldiers for the execution of public works is regarded by responsible people as worthy of serious consideration. It provides a solution for many difficulties, and has the advantage over all other methods that the results will have a financial value. The Chinese army has shown its poor worth both in Siberia and in the civil war. In various places in China the soldiers are an absolute pest and are ruining trade by unwarrantably interfering with communications. Unless something is done, revolution of a Bolshevik type is almost certain to occur.

The remedy is probably along some such lines as the following. From the whole army as it is, by selection of the best officers and soldiers, a small but efficient army should be formed with uniform equipment. This would be ample to cope with all internal trouble, and the country could afford to keep it in good shape. The remainder should then be formed into labor corps, and, in conjunction with the Ministry of Communications, be set to navvy work. Members of the labor corps returning from France would be very useful as foremen and have the necessary military training for proper co-operation. An opportunity would also be afforded of employing the very numerous Chinese engineering students. Provided a certain amount of common sense is used, the ex-soldiers could be employed even on foreign controlled railway construction. In any case, the so-called main roads should be put into repair. The maintenance and improvement of the river dykes in Kwangtung, Honan, Shantung and Chihli also provides enormous opportunities for the immediate adoption of this expedient.

An example of what can be done in this way is seen in the road now almost completed between Shanghai and Woosung.

Such a road has long been desired especially by the motorists, and for several years past the Whangpoo Conservancy Board, in virtue of its interest in the dyke, has been endeavoring to make arrangements for a road to be built on it. Eventually this year General Lu, in conjunction with Mr. Tsao Lu-ping, of the Works, Police and Tax Bureau of Northern Shanghai (Chapei), having the promise of financial assistance from the Conservancy Board and the Automobile Association, started operations. Over 1,000 soldier navvies were employed, and the earthwork is already practically complete. Two concrete bridges are being built by contractors under the superintendence of the Whangpoo Conservancy engineers, and in a few months this road will probably be open to traffic.

In this way the ennui, inefficiency, truculence and economic disabilities of the Chinese soldier can be entirely transferred into productive results, which will benefit all parties. No one will lose any "face," and, with proper care, the extra expenditure involved will be balanced by a reduction of the strictly military expenses and the increased income due to improved facilities for communication.

The Nanking City Railway

On a recent visit to Nanking we had occasion to note the deplorable condition of the railway which runs from the terminal of the Shanghai-Nanking Railway at Shiakwan into the city of Nanking, and known as the Nanking City Railway. The station houses are in a deplorable state of disrepair, the station yards are untidy and neglected, and all property is sadly in need of paint. The safety of the travelling public is entirely disregarded judging by the condition of the permanent way. Where the greatest care and vigilance should be shown in railway maintenance practically none has been deigned the track or equipment of this particular line. The ballast is badly boxed, the track is a weed garden in parts, spikes are missing in many places from the rails, and sleepers are in very bad condition, many being split and others twisted and warped. In short the line is in a dangerous state of disrepair. It is remarkable that serious accidents have not taken place up-to-date but it is certain that unless attention is given immediately to the condition of affairs costly trouble if not loss of life will be the result.

It is unfair to use this illustration of bad management in condemnation of Chinese control of such modern services as railways, but considering that the well managed Shanghai-Nanking Railway is a standing example of what ought to be done, and is daily within range of the vision of those who draw pay to manage the short spur line, one can be pardoned for thinking that the Chinese character or understanding of what is due the public who entrust themselves to their safe keeping is deficient in those qualities which make the European successful in the management of important public services. Some change is called for on the Nanking City Railway, at all events, and the sooner the conduct of the line is rigorously inquired into the better. If the officials at Nanking are wise they will immediately invoke the aid of foreign railway experts to put their line in order and make it safe for use, and take steps to see to it that the officials who have been entrusted with the control and care of the line are replaced by others competent to do the work and conscientious enough to realize their responsibilities towards the travelling public. The Chinese have to remember that it is by little things like these that they are judged, and if critics condemn them as incompetent to manage large affairs they have none but themselves to blame.

Shanghai Coal Scandal

The coal situation in Shanghai this winter is acute, and with the beginning of the season of bitter cold when artificial heat is one of the absolute necessities of life the high price of fuel will be a cruel burden upon the thousands of foreigners of moderate

means. If the excessive price of coal was the result of anything save what has the appearance of a contemptible squeeze, it could be borne with better grace. However, that something is decidedly wrong in Shanghai is proven by the fact that household coal of the grade known as No. 1 is being delivered in the foreign settlements of Tientsin at a retail price of \$7.50 per ton. In other words, by paying the Tientsin retail price of coal, which would presumably include delivery to the steamships which lie alongside the Tientsin Bund and which discharge at the Shanghai Bund, and adding to it charges for sacking, the nominal export duty at Tientsin, the import duty at Shanghai, the general cargo rate of freight and cart hire in Shanghai, coal can be laid down here at a total cost of \$13.07 a ton where we are now forced to pay from \$26 to \$32 a ton, which is usually short in weight anywhere from 50 to 300 pounds.

If coal can be laid down in Shanghai after paying the highest retail price in another port and the highest possible freight rate and handling charges, at \$13 a ton, no further proof is needed that we are being mercilessly bled by a ring of coal merchants for whom no possible defense can be raised. Further proof is furnished by the fact that employees of shipping concerns in Shanghai are being provided with the best Japanese steam coal at about \$12 or \$14 a ton, with all the freight and handling charges included.

As the oppressiveness of the burden upon the majority of Shanghai residents is not doubted, and has often been lamented in the press and discussed without end, one of the several administrative bodies or civic associations should immediately arraign the coal merchants, and if the defense is put up that their cost of coal is more than \$13 a ton the Tientsin case can be quoted to them, and if a boycott is threatened it would not be difficult to get a supply of coal at least sufficient for household purposes within three or four days.

With half the effort needed to address a complaining letter to a local newspaper the householder can order his coal from Tientsin and take possession of it in Shanghai at a clear saving of at least 50 per cent., and if no effort is made collectively to bring the coal thieves to a halt at least the frugal householder can reduce his burden by half with the simple expedient of sending a remittance to any of the coal dealers in Tientsin with the request for prompt shipment of fuel requirements.

Beware of Spanish Influenza

The epidemic of Spanish Influenza which is now ravaging the United States and South Africa is serious enough to require the immediate laying of plans against a possible visitation of the malady upon this country. Every ship which calls at a China port from the United States is a possible carrier of contagion, and warning of this should be taken from the case of a Japanese vessel which put into Manila but a week or so ago with thirteen deaths on board. In the United States the health authorities learned that a check could be put upon the spread of the disease by requiring the wearing of masks by those whose business takes them in the open, and the confidence held in the use of that simple device can be gauged from the fact that in one state the failure to be provided with it is punishable by a heavy fine and imprisonment. Before the manufacture and distribution of masks could be carried out in that highly organized country the disease had spread from coast to coast and had claimed some 350,000 victims. If the enlightened people of China are to guard themselves against a possible epidemic here, masks must be made in large quantities and put by for quick application. Purely Chinese epidemics like the plague discriminate between dirty Chinese communities and foreigners residing in clean settlements, with hygienic homes and surroundings, but this Influenza, worse than any of the Chinese epidemics, is no respecter of persons and rages through the most highly civilized and developed countries without regard to hygiene. While the germ has not yet been identified or segregated, we know at least that the mask is a preventive of infection and in the lack

of any better remedy the municipalities in China should now be investigating its use and arranging for the production of them in quantities.

The Government of South Africa, which felt the dread epidemic at an early stage in its development, was kind enough to take steps towards the stopping of its spread beyond the Straits Settlements, and very likely forwarded the results of their experience to other governments in the East. In the absence of concerted action, individuals in China would be wise to provide themselves with masks of the best type formerly used in other epidemics, and undoubtedly the local physicians could furnish some good advice on the question.

One thing is certain, so long as the incubation period of the Influenza microbe is not known definitely (and we have the Manila case proving that it was transmitted on a vessel some time out of port) the people of China cannot rest in the belief that our isolation from the infected areas, both in point of distance and time of journey, will guard us against the visitation of the disease which is more terrible than the plague. The announcement that about 6,000,000 persons have so far perished should stimulate someone to action.

China's Political Situation

The political situation in China varies very little. The northern and southern politicians are struggling for predominance of views and influence over the projected peace conference. The south challenges the north with talking peace and acting hostilely, and the north retorts with similar accusation against the south. That peace is in the air is believed by all optimists, and the north have gone so far as to appoint their delegates for a peace conference but at this writing the south are holding back, though it is stated that Mr. Tang Shao-yi has been slated as the head of the southern delegation. There are one or two points in dispute, however, and one is the venue of the conference. The north want it on Chinese territory at Nanking, the south desire it within the limits of the foreign settlement at Shanghai—an anomalous demand seeing that the very politicians who urge this are the ones who clamor most for the abolition of foreign influence in China and the return of foreign territorial rights and holdings in the country.

The Allied nations endeavored to force a peace conference by a gentle reminder on December 3. The Ministers in Peking then waited upon the President and presented an *aide memoire*, a copy of which was also presented to the southern leaders by the Allied Consuls at Tientsin. The document reads as follows:

"It is with grave concern that the British, French, Italian, Japanese and American Governments have witnessed the continued civil strife which for the past two years has divided this country. This unhappy division has proved no less harmful to foreign interests than disastrous to the welfare of China itself. The consequent unrest has been an encouragement to the enemy, and during the crisis of the war hampered the effective co-operation of China with the Allies, and now that that crisis is past and the nations look forward to the hope of effecting some reorganization of the world for the realization of peace and justice among all peoples, the disunion still prevailing in China makes their task more difficult.

"The associated Governments aforesaid have observed with hopefulness the steps already taken by the President of the Republic of China with a view to the settlement of civil strife, and have been happy to believe that the attitude of the Southern leaders indicated no less a desire on their part to arrive at a suitable adjustment of differences. These Governments, therefore, have taken the occasion to express the sympathy and hopefulness with which they regard these indications of a desire on the part both of the Peking Government and the leaders of the Southern Party to set aside all considerations of merely personal sentiment and legal technicality and, while carefully refraining from taking any step which might be an obstacle to peace, to seek without delay, by frank conference, some means of attaining a reconciliation upon a basis of law and devotion to the interests of the Chinese nation such as is necessary to assure to China peace and unity within its borders.

"In taking this action to express earnest sympathy with the efforts of both sides to achieve a solution of the difficulties that have hitherto divided them, the Governments aforesaid desire to make clear that in so doing they have contemplation of no ulterior plan of intervention and no desire to control or influence the particular terms of the adjustment, which must remain for the Chinese themselves to arrange. They only desire to lend what encouragement they can to the aspirations and efforts of both parties

for a reconciliation and re-union which will enable the Chinese nation to bear the more worthily of its own traditions its part in the reconstruction which the nations of the world are now hoping to attain."

The immediate effect of this demarche on the part of the Powers was to chasten the Tuchuns who were congregated in Peking. Most of them promptly left for their various headquarters, though it is believed that their departure from the Capital was prompted as much by the vision of an empty treasury, the Japanese Government having almost simultaneously issued a statement that no further loans would be made for the indiscriminate use of the Government. In view of the large number of loans previously made by Japan, the decision to put the stopper on was somewhat belated, but nevertheless it may be effective in compelling the militarists to unbuckle their armor. The Japanese decision was published in Tokyo on December 3 as follows:

"Mischievous reports of Japanese activities in China more particularly with regard to the granting of loans have for some time past been in circulation and have imputed to the Japanese Government intentions which are entirely foreign to them. For obvious reasons the Japanese Government cannot undertake to discourage financial and economic enterprises of their nationals in China so long as those enterprises are the natural and legitimate outgrowth of special relations between the two neighboring and friendly nations. Nor are the Japanese Government at all receding from their readiness to render needed financial assistance to China consistently with the terms of all the declarations and engagements to which they are a party, should the general security and welfare of China call for such assistance. At the same time they fully realize that loans supplied to China under the existing conditions of domestic strife in that country are liable to create misunderstandings on the part of either of the contending factions and to interfere with the reestablishment of peace and unity in China so essential to her own interests as well as to the interests of foreign Powers. Accordingly the Japanese Government have decided to withhold such financial assistance to China as is likely in their opinion to add to the complications of her internal situation, believing that this policy will be cordially participated in by all the powers interested in China.

But since the communication of the above documents the various military leaders have had time to collect their wits, and apparently they have determined not to abandon their struggle for supremacy. General Li Shun has consistently worked for peace and the abolition of the Tuchunate, but he has support from no other military quarter in this regard. Even some of the southern leaders have told their following that the Tuchun must not be opposed with the idea of completely ousting him—this, notwithstanding the fact that the excuse for the fighting of the past year or so has been the necessity and desirability of the overthrow of the northern militarists—so it would seem that the Tuchuns have been able to make a convert or two in the ranks of the avowed enemy. What it all means the man in the street is unable to say, but it seems fairly certain that the Tuchuns of the south are with their brothers of the north in resisting a nationalization of the army and the abolition of individual commands. This is the very thing that will have to be effected if permanent peace is to be established in China, and it is something to which the Allied Powers will have to give undivided attention. At the very least the Powers must insist that any peace conference will be free from military influence of the kind which the northern Tuchuns wish to exercise, and to this end they ought to take the first opportunity of expressing their views.

In order to make its position clear the Peking Government issued a statement on December 21, which was summarized in a telegram by Reuter's correspondent as follows: The Government has issued a statement defending its action during the negotiations for peace with the South during the past several weeks. Telegrams exchanged between the North and South, with direct textual references, are published with the statement, which sets forth seven allegations defending the action it has taken and condemning the attitude of the Southern leaders. It first refers to the mandate of November 16, suspending hostilities; second, deals with the Southern telegram demanding equal representation at the forthcoming conference, to which request the North conceded; third, the Peking Government offered to compromise on the name to be given the meeting and agreed that the conference should take its name from the place of meeting.

The fourth clause argues for the selection of Nanking as the seat of the Conference, setting forth that the matter should be settled on purely Chinese territory rather than at Shanghai. The Government also suggests that Nanking should be selected because Li Shun's activities as a mediator have been ignored.

The Peking Government resents the accusations that peace overtures come from the North while it is actually conducting war operations and in the fifth clause points out that brigandage actually flourishes in Fukien and Shensi, thus defending the sending of Northern troops to quell the trouble in these provinces. The document refers to reports from Szechuan indicating that Southern commanders are advancing on Paochen and Nanchen, proving that the South is talking peace while actually waging war.

The Southern claim for joint delegates to the European Peace Conference is termed unreasonable because such a delegation would nullify the Chinese representation, says the sixth clause. That the Peking delegates to the domestic conference have already been appointed while the Southern representatives have not been appointed and the South ignores telegrams requesting action, thus making it impossible to know whether or not the South sincerely desires peace, is the last contention.

International Politics in Chinese Railways

In the course of an article by Marquis Komura, son of the late Foreign Minister of Japan, translated by the *Herald of Asia*, the writer states that "there is an astonishing heap of questions in China of tremendous importance to be solved. Take the railway problem, for instance. There are 4,975 miles to be built at a total outlay of Yen 660,000,000, for which contracts have already been signed by England, France, Russia and Belgium, though no actual advance of money has yet been made. Then Yen 400,000,000 has already been advanced on various other railways, while there are still many other lines under negotiations between China, and England, France, and America. How are funds to be furnished for these railways? What political and economic changes will not take place internationally on the morrow of their completion! What will be their effect on Chinese thought and civilization? Do the people here realize the real meaning of these questions? This policy of railway loans is the latest form, which international politico-economic exploitation of China—that saw its beginning at the close of Japanese-Chinese war—has taken for the establishment of interests of different Powers in China. In short the railway question in China is in truth one of international politics, the like of which is found nowhere else."

Japan and Loans to China

In connection with Japan's statement laying it down that no further loans of a political character are to be made to China until peace has been restored in the country Viscount Uchida, the Japanese Minister of Foreign Affairs, took occasion on December 20, when addressing the House of Peers, to emphasize the necessity of unity in China, and the determination of the Government to discriminate most carefully between economic and political loans. While the Minister did not lay before the House the steps to be taken the following notification of policy previously issued will be strictly enforced:—

1.—Those investors intending to advance a loan or open similar negotiations with the government authorities in China or Siberia, whether it be with those of the central government or of the local, which is likely or possible to be used for political expenditure, are required to report the same either to the Foreign Office, or to the diplomatic representative or consul of the Imperial Government.

On receipt of such report the authorities of the Foreign Office on consultation with those of the Finance Department and other offices as it may be necessary will give them the necessary guidance.

2.—Those investors who are not asking for such guidance or are actually in course of negotiation contrary to this instruction may not receive the protection of the Government.

3.—According to the nature of the question at issue or the degree of progress of the negotiations, the authorities of the Finance Department or those of other offices as it may be necessary, may be made to confer directly with the investors.

Mr. Chokai Okabe, a secretary of the Foreign Office, has been appointed to look after the loans to be made to China, and Mr. Shigeru Nagai, another secretary of the Foreign Office as well as of the Finance Department, to look after loans to be made to Siberia. Hereafter, any Japanese capitalists who want to invest in those countries are expected to consult with these officials before taking any definite action.

Housing Problem in Hongkong

[BY CONSUL-GENERAL GEORGE E. ANDERSON, HONGKONG.]

As a result of the continued influx into Hongkong of large numbers of Chinese people of the more well-to-do classes which has followed continued unrest in South China, the housing problem in Hongkong, which has been more or less serious for the past six or seven years, has again reached a very acute stage. At the present time the shortage is felt by practically all classes of the colony's population. Ever since the founding of the colony there has been more or less trouble with housing. This has been due partly to the expense of house construction and partly to the fact that a large share of the population is only temporary in its stay in the colony. There is, therefore, a lack of a continuous demand from the same people for accommodations and of insistent public spirit in the handling of such a problem. Then, too, from the beginning it has been the policy of the larger commercial, shipping, banking, and similar firms to furnish residences for their managers and usually for most of their senior employees; and in many instances a mess arrangement is made for the junior employees as well. The result has been that one class in the colony is well supplied with houses and other means of comfortable and convenient living while there is a lack of residential quarters for other people.

Natural Divisions of Hongkong

The colony of Hongkong consists mostly of an island about 11 miles long and perhaps 3 miles in width, and a portion of the mainland running back 21 miles from the coast at the point of a peninsula opposite the island from which the colony takes its name. On the mainland is a considerable city known as Kowloon, and on the island of Hongkong there are Chinese villages or towns of varying size and importance scattered along the coast on the side of the island away from the mainland. The principal part of the colony is the city of half a million inhabitants, commonly known as Hongkong but more properly designated as Victoria. This city, located on the famous harbor of Hongkong, in a general way consists of three natural divisions. The first is the littoral stretching along for perhaps six miles between the sea and the mountain which composes the greater portion of the island; the second is the slope of the hill running from this littoral up to about 600 feet elevation, commonly known as the lower levels, which are commonly spoken of as lower, middle, and upper levels of the nonpeak district; and the third is the peak district—the extensive residence district stretching along the ridges and about the gaps in the mountain for about three miles, and ranging from 1,100 to 1,600 feet elevation.

The littoral at the present time is occupied almost altogether with the business interests of the city, including the principal hotels and public buildings. The upper levels of various degrees include the older residences of the white population and a large number of the new buildings erected to house the wealthier Chinese immigrants. The peak district may be considered the more fashionable part of the city. In Kowloon there is a large residence district which is occupied principally by middle-class people. The littoral property already is more valuable than its practical use justifies. There is an abundance of room on the peak but the better sites have already been occupied and there is considerable agitation for the opening by the Government of new sites now occupied by a catchment basin and reserve of the water-works system. There is also unlimited extension possible on the Kowloon side of the harbor, and there is already under way a large reclamation scheme on a part of the Kowloon water front which includes the construction of a large suburb for well-to-do Chinese. It is also the announced policy of the Government to encourage the opening of the sites for residences at some distance from the city proper by the construction of good roads suitable for motor cars, and this policy doubtless will have an appreciable effect on the situation in the course of a number of years. At the same time the construction of residences at some distance from the city will be in the nature of an experiment in Hongkong and is not likely to appeal to capitalists building houses for renting purposes—the sort of house which is most acutely needed.

The Problem an Old One

From the beginning of the colony the margin between the demand and supply of rentable houses has been very narrow. In the earlier days most of the better residences were along the lower levels of the city of Victoria. As the colony developed, the tendency has been for builders of the better new houses to seek the higher levels. These earlier mansions have in time passed

into the hands of the middle-class people, and now later have passed largely into the control of Chinese. The Chinese population of the more prosperous sort has increased from year to year in the ordinary development of the colony, and in a general way, the construction of houses on the higher of the lower levels of the city and on the peak has kept pace with the increasing demand of the Chinese for houses of European style of construction. The white population has gradually moved from the old houses on the lower levels to the newer houses on the upper levels, the Chinese taking over the houses left by them.

With the outbreak of the revolution in 1911, however, there began a very rapid movement of wealthy Chinese from South China districts into Hongkong, where safe and ready investment of capital, improved living conditions, educational facilities, and social attractions have become more and more attractive to Chinese who can afford to take advantage of them. This incoming movement resulted in a sudden and extraordinary demand for houses, which led to sharp advances in the price of real estate and of rents of all grades. Wealthy Chinese buyers have bid against each other for property until in many cases all proper proportion to the original cost and fair value has been lost. Subsequent disturbances in China, particularly in South China, due to civil war and the loosening of governmental ties have resulted in increasing emigration to Hongkong, and so, in spite of the building of houses for the Chinese on a large and increasing scale, the demand has led to the purchase of a large number of residences formerly occupied by white people, including most of the houses on the upper levels of the lower of nonpeak districts.

Rents have continued to go up until for many people, especially those paid on a gold basis and subject to the troubles of the unusually high value of silver, housekeeping is out of the question. To add to the trouble most of the hotels are unusually full and prices have gone up until, exchange and all considered, rates for ordinary accommodations equal those for the highest class of accommodations in American metropolitan hotels.

Relief Being Sought

Relief from this state of affairs is being sought by the people of the colony, but so far no adequate scheme has been offered. The colonial government has followed the policy for several years of constructing houses for the use of its officers and employees, and a large number of suitable quarters for this class of the population have been constructed and serve in a way as models for what are required for other classes of the population. Immediately preceding the war several schemes for "garden cities," co-operative building arrangements for the construction of special suburbs, and the like, were presented and probably would have brought about some practical results by this time had not the war interfered. Under present conditions, however, in view of the war and of the difficulty in securing supplies of various sorts required for house construction even on a local basis, and of the strong demand for capital for other purposes, it seems very doubtful if relief can be had for several years to come. There is a large amount of building at the present time, but the houses under construction are suited principally to the incoming Chinese people from South China, that class of construction being far the most profitable at the present time. The chief need of relief is for the accommodation of the better class Europeans of more or less temporary stay in the colony.

It is interesting to note from the Calender of the Hongkong University for this session that the majority of the graduates are engineering students. To those who realize that the great need of China is engineering and industrial effort this fact will be encouraging since it indicates that the Chinese themselves are conscious of the demand that will exist in the near future for engineering skill and knowledge. The University of Hongkong sets a very high standard in all courses, and the engineering course extends over four years of three terms each. The lectures embrace chemistry, physics, mathematics, theory of machines, machine design, iron and steel, strength of materials, design of structures, heat engines, hydraulics, surveying, electrical power generation, transmission and distribution. There are twelve laboratories which are extensively equipped with machines and apparatus for demonstrating and making investigations in the subjects of the lectures and for giving students experience in making the test which engineers in practice may be called upon to perform. The London Assessors—Professor S. M. Dixon, T. Mather, and D. A. Low—each year award the honors degree on the definite instruction of the University Council in order that the standard of the London University Honors Degree in Engineering may be maintained.

The Scandal of the German Bank at Shanghai

Liquidation Delayed by German Influence

Following the declaration of war by China against Germany on August 14, 1917, the Chinese Government decided to seize the various branches of the Deutsch-Asiatische Bank in China, and consequently appointed Mr. Passeri, the Financial Adviser, and Mr. Sun Han-chang, the Manager, of the Bank of China in Shanghai, to act with the local administrative Chinese authorities, in the seizure of the local branch of the Deutsch-Asiatische Bank. Subsequently, in October, the Chinese Government decided upon the liquidation of the Bank, and to that effect regulations were drawn up for the guidance of the Liquidators appointed in the person of the two above-named gentlemen. These regulations are not all that could have been desired from the point of view of Allied interests and of the elimination of German trade and influence in the Far East. In fact, Article 3 of these regulations stipulated that "All claims and obligations of enemy subjects shall not form part of the proceedings of the liquidation," while special regulations were set out for the payment of special allowances, to be disbursed monthly to those enemy subjects who had a credit balance with the Deutsch-Asiatische Bank.

The position of the Liquidators, particularly that of Mr. Passeri, must have been a very difficult one, as the regulations were evidently hampering them in carrying out the chief aim that liquidation should have had, that is, of actually winding up the Bank and consequently causing the liquidation of all the German firms in Shanghai.

It is within our knowledge that Mr. Passeri tried his best to obtain supplementary instructions concerning the debts of German firms, and the eventual filing of claims in the local courts against them in order to foreclose on the securities, but he was not successful, and every time that his pressure on Peking became too strong he was threatened with a dismissal that would not have been to the advantage of Allied interests. As far as we can make out all that Mr. Passeri could do was to bide his time and wait for the moment when circumstances here and in Europe could allow him to act, as he did in fact, as soon as he could.

We do not wish for a moment to lay the blame of this camouflage liquidation of the German Bank on the Chinese Government, particularly so because the Chinese Government is not supposed to be the trustee of Allied interests in the Far East and there is no blame that can be attached to the Liquidators themselves, as they could not act contrary to instructions from Peking. We might say, in fact, that no blame can be attached to anybody in particular—that the only reason, the true reason, why the immediate liquidation of the German Bank did not take place is to be found in the position at the time of the Allied forces on the western front, and this will be easily understood if it is realized that every time either the Allied Ministers or the Liquidators tried to press Peking to action, a counter-pressure stronger and far more dangerous was exercised by the Central Powers threatening retaliation on the Banks of Belgium and in Northern France.

Mr. Passeri, the representative of the Allied interests in this liquidation, continuously kept the competent authorities informed until, in September last, when things looked pretty bad, he felt it to be his duty to report the matter confidentially but officially to the Allied Ministers. After that one of the local newspapers obtained information from outside sources and published a good deal of matter on the non-liquidation of the German Bank, the pro-German attitude of the Chinese Government and that of the Chinese Liquidator. The staff of the Bank, which up to that time had been practically all German, was dismissed, but no step was taken towards actual liquidation of the Bank. Even at that moment—at the beginning of November, 1918—the Allied authorities were not quite certain whether they had a right to insist on the liquidation of the Bank, as the Chinese Government was still saying that they always meant it to be a sequestration.

And nothing would have happened had not Mr. Passeri taken it upon himself, on November 9, to carry out the actual liquidation of the Bank, telegraphing this decision to the Peking authorities. Faced with a *fait accompli*, the Chinese Government, which was having an easy time in Peking with the diplomatic representatives of the Allied Powers—who were not quite certain as to what they ought to do—telegraphed to Mr. Passeri that they agreed to his action, instructing him to carry out the liquidation in a strict manner. But while they were doing that

they were already devising ways and means to remove Mr. Passeri from office; and, in the face of the full support of the Allied Ministers, on the very day that the British Minister, Sir John Jordan, as Dean of the Diplomatic Body in Peking, was telegraphing to the Senior Consul at Shanghai to renew to Mr. Passeri the assurance of their full support, the Chinese Government was telegraphing to Mr. Passeri to vacate his Liquidatorship and to hand over his office to Mr. S. E. Lucas, one of the submanagers of the Bank of China at Peking, and a man who had been sent to Shanghai a few days before under lame excuse by the Chinese Government itself. It would take too much space to chronicle all that happened in those days in Peking between the Chinese Government and the Allied Ministers, and in Shanghai between Mr. Passeri, the unjustly superseded Liquidator, and Mr. Lucas, but it is significant that a few days after Mr. Passeri was superseded two German employees of the Bank were re-engaged. We fully believe that the force that obtained the removal of Mr. Passeri as Liquidator of the Deutsch-Asiatische Bank in Shanghai a fortnight after he had actually started on the liquidation of the Bank, and the very day that the first German case brought up by him came to the Mixed Court for trial, was simply German influence—influence that made itself felt in Peking, and, in this instance, evidently to a stronger degree than that of the Allies.

The payment of Mr. Passeri's fees as Liquidator formed the object of a claim which he laid against the assets of the German Bank in the Shanghai Mixed Court, and in that case, the issues of which were very simple, side issues were introduced which were not relevant to the case but which might have confused the minds of the judges. During the course of the case on December 18 Mr. Passeri, who had refused till then to hand over the keys of the Bank, and who had arranged in his own Court (Italian Consular Court) on December 16 to give up all the keys but the one to the treasury in order that the pressing of the German claims would not be retarded, obtained the following discharge from the Shanghai Bureau of Liquidation:

"This is to certify that we have this day taken over all securities, safe custodies, documents, books, accounts, files, etc., of the Bureau of Liquidation of the Deutsch-Asiatische Bank in Shanghai and that everything has been found in order. Also that the accounts have been balanced and found in order. We have also checked the contents of the treasury, compared it with the books, and found it in order. According to the understanding arrived at, at the Italian Consular Court on the 16th instant, we have agreed to let Mr. Passeri keep a key of the above Treasury pending the decision of the case that we have filed against him in that court. We therefore gave him a full discharge of his administration as co-liquidator of the Deutsch-Asiatische Bank pending the official discharge that will be obtained from the Ministry of Finance.

Dated the Eighteenth day of December, 1918.

BUREAU OF LIQUIDATION OF THE DEUTSCH-ASIATISCHE BANK,

(Sgd.) S. E. LUCAS,

SUN HANG-CHANG,
Liquidators.

In the presence of G. H. WRIGHT, 24 Yuenmingyuen Road,
Shanghai, China, Solicitor."

Two days later, however, Mr. Passeri was subjected in the Mixed Court to a cross-examination by the lawyer of the Bureau of Liquidation, and judging by that, as well as by the examination in chief of Mr. Lucas, one cannot help feeling that inaccurate information had been obtained from the dismissed German staff of the Bank concerning details of work that had no bearing on the case, but which bore all the evidence of having been introduced simply in order to attack Mr. Passeri and to implant doubts in the mind of the public as to his administration. This information was rendered so much more incorrect coming as it did from persons who had already signed the discharge of Mr. Passeri's administration, and who had no right therefore to question him further with regard to it. Mr. Passeri, however, lived well up to his reputation, and, in the examination in chief, as well as in the cross-examination of Mr. Lucas, all the baseless allegations made against him were torn to shreds to the satisfaction of the Court, which, in its judgment, which we append, gave full satisfaction to Mr. Passeri and rehabilitated him in the eyes

of the public if such rehabilitation was necessary; and upon the triumph which this vindication gives him Mr. Passeri is to be warmly congratulated.

The judgment of the Court as read by the Assessor follows:

The court finds:—

1.—That the applicant was liquidator of the Shanghai Branch of the Deutsche-Asiatische Bank under appointment from the Central Bureau of Liquidation, a department of the Ministry of Finance.

2.—That as such he is entitled to a remuneration by way of percentage.

3.—That Mr. Wang Koh-ming, head of the Central Bureau of Liquidation, as testified by applicant, had verbally agreed with the said applicant to grant certain remuneration for his special work as liquidator.

4. That this remuneration is to be paid in accordance with Article 18 of the regulations governing this Liquidation of the Deutsche-Asiatische Bank, out of the assets of the said bank.

5.—That applicant is entitled to four per cent. on all sums collected or brought to credit as per statement filed by him and signed by his co-liquidator.

6.—With reference to the percentage claimed on all cases filed the court cannot allow it in the uncertainty of the possibility of the collection of the amounts claimed. Applicant, however, in handing over the cases to the counsel of the local Bureau of Liquidation, has done practically all the work which would have been done with reference to the same. The court fixes his compensation on this point in the round sum of Tls. 50,000.

Judgment is entered accordingly in favor of the applicant.

The Tariff Revision Commission

The Commission which has been sitting since last January to revise the Chinese Customs Tariff completed its labours on Friday, December 20, when it unanimously approved a draft tariff which when ratified by the Powers will in part rectify an injustice which has been done China for the past ten years or so. According to treaty China is entitled to impose a duty of 5 per cent. ad valorem on imports and exports but because of variation in values since 1897-1898, when the specific values on which the tariff was based were fixed she has been getting but about 3 per cent. The business of the Commission was to determine an effective 5 per cent. and they proceeded about this task by taking the costs prevailing as from 1912 to 1916 as a basis for valuation. This will not give China 5 per cent. All manner of data such as Customs returns, market prices, invoices, etc., covering a period of five years, were secured and studied in order that the fairest possible treatment could be accorded China. The new tariff has been rearranged according to groups with the idea of facilitating reference for Chinese and Japanese, but an alphabetical index is given for the use of those knowing and using the alphabet. To expedite the consideration of the various articles taxable they were grouped under thirty different heads, and sub-committees were appointed to deal with them, the sub-committees being composed of representatives of those countries most concerned in the article or articles dealt with. For instance, while Group 13—Canned Goods and Provisions—called for the attention of the representatives of fourteen powers, Group 8—Linen Goods, Hemp Goods, etc.—interested but four, though it was competent for any delegate to be on any sub-committee he desired. The findings of sub-committees were submitted to all the delegates, who examined them and then met as a Commission to approve them. The meetings of the Commission were, in the majority of cases, characterized by good will.

The draft tariff will be submitted by the various delegates to their respective governments for ratification, and it is expected that this will be accorded without delay.

When the consent of all the Powers has been obtained it is expected that this date will be announced publicly, and after that merchants will have a delay of one month within which to ship under the old tariff.

We are publishing the revised tariff as proposed by the Commission as a supplement to this issue.

All those who recognize the value of the missionary effort in opening the eyes of the Chinese to western ideas and ideals, to hygienic methods of living and to crop and other improvements, to say nothing of the teaching of Christianity, will appreciate the effort the "Chinese Recorder" is making to celebrate its fiftieth anniversary by raising \$10,000 to enlarge its usefulness as an interdenominational and international missionary organ. For nearly twenty years China missionaries spoke through the "Chinese Repository"; then for nine months the "Missionary Recorder" took its place. In May, 1868, the work was taken up by the "Chinese Recorder" and "Missionary Journal," now known as the "Chinese Recorder."

The "Chinese Recorder" was first published by the Methodist Publishing House in Foochow; later the Presbyterian Mission Press of Shanghai accepted the publishing responsibility; in 1914 the entire editorial and publishing responsibility was transferred to and assumed by the present *interdenominational* Editorial Board.

The income from subscriptions does not keep pace with the growing expense, yet it is necessary to keep the subscription price down if the "Recorder" is to be read widely by the missionary body. The "Recorder" is not a commercial enterprise; it is run in the interests of the Protestant missionary program. Up to date it has paid expenses, but is now being financially pressed and cannot maintain its present status, leave alone grow, without additional funds.

Gifts towards this Fund may be sent: *In China:* To the Editor, "Chinese Recorder," 5 Quinsan Gardens, Shanghai.

In spite of repeated protests from the foreign Legations and Banks against the so-called currency reform programme of Peking, the Currency Bureau is going its own way. Baron Sakatani has been engaged as Adviser to the Bureau, the emolument attached to the office being £4,000 sterling per annum, the recognized rate for first-class foreign advisers in China, and the process of development of the Bureau is making great headway, under the direction of the Director General and the Governor. The Bureau will consist of two Divisions—Currency and Banking—with one Director to each Division. The present Currency Department of the Ministry of Finance will be amalgamated with the Bureau. There will be two Councillors and four Secretaries. All Government Offices in Peking and in the provinces have been notified to address all despatches concerning currency questions to the Pi-chih-chu, or Currency Bureau, which is now situated in a building behind the Ministry of Finance.

The American Association of China recently entertained a number of Shanghai's leading Chinese business men at a display of films illustrating American business organization and manufacturing processes. The Chinese guests were greatly impressed by the highly developed mechanical processes shown in the manufacture of watches, tools, and glass, and the high state of organization exhibited in the management of such a business as Montgomery, Ward & Co., establishment at Chicago. The American Association are to be congratulated upon the adoption of this method of bringing home to the Chinese a knowledge of manufacturing processes as carried on in America. It is more effective than all the talk and writing that can be devoted to the subject, and impressed the Chinese deeply for the simple reason that they saw developing before their eyes systems which compared with their own processes and developments as Niagara compares with a leaking spigot.

Mr. Obata, the new Japanese Minister to Peking, arrived in the Chinese Capital on December 22. The development of Mr. Obata's policy will be watched with great interest, especially by the Chinese, many of whom have made up their minds that he will use the strong hand.

The resignation of Mr. Liang Shih-yi as President of the Senate at Peking, has been accepted. Mr. Liang severed his connection with the so-called Parliamentary institution of the Capital because he realized that if order is ever to be effected in this country the alleged Parliament must go. He is in favor of an immediate peace conference, malgre the attitude of extremists, and regards the suggestion for a compromise laid down by Dr. W. W. Willoughby in a recent article in the FAR EASTERN REVIEW as the best basis for a settlement.

Mr. Taylor and the Customs Service

Strong Attack by an ex-Commissioner

A pamphlet has been sent to the FAR EASTERN REVIEW entitled "The Maritime Customs Service of China: A Plea for Reform," by Mr. F. E. Taylor, Commissioner of Customs, retired. Mr. F. E. Taylor was for some years Statistical Secretary in Shanghai and in that capacity was well known to all the principal merchants. He was generally considered to be one of the ablest men in the Customs, although perhaps suffering from what, in speaking of Sir Robert Hart, he has called "a too pronounced consciousness of his own abilities." He was generally popular. We are not told of the exact circumstances of his retirement, but it is easy to infer that it was not effected without friction, and some bitterness resulted. This bitterness seems to have found expression in the pamphlet before us. It is a disjointed production which can be justly divided into two parts, one of which has something to do with the Customs while the other has not. He begins by a note on German trade which, admirable in its truth, has nothing whatever to do with the rest of the pamphlet, and it is difficult to discover why it is included unless the author thought it too good to be lost. The pamphlet itself opens with an account of the history of the Customs, which will be new, we fear, to the majority of the public. It is interesting reading and reflects the British genius for solid constructive work with unlikely material. His portrait of the late Inspector General, Sir Robert Hart, will be best judged by the rapidly diminishing number of those who knew that great administrator: but we shall be surprised if it does not elicit a smile from them. With the death of Sir Robert Hart, he comes to the subject of his work: for the Inspector General of Customs being omnipotent, the success of his policy is reflected by the condition of the service.

Mr. Taylor refers to a previous article on the Customs which appeared in the FAR EASTERN REVIEW, but the reviewer reads with surprise the curt manner in which the grievances of the Outdoor Staff, so well known throughout China, are dismissed. The following is the entire passage dealing with them:

"As for the Outdoor Staff, men in receipt of Tls. 75 per month found small consolation in being told that 'We must be prepared to shoulder some part of the common burden,' and in being advised to attempt 'the reduction of club bills,' together with 'the abandonment of futile and unnecessary expenditure.' And it is not surprising, if they were inclined to criticise such advice when they reflected on the enormous gap between their own pay and \$6,000 per month supplemented by many allowances."

If Mr. Taylor wishes to help the Outdoor Staff of the Customs by calling attention to their grievances, this is not enough; if it is his purpose to throw ridicule on Sir Francis Aglen by quoting this official inanity it is two for Mr. Taylor and one for the Outdoor Staff. The remainder of the charges laid against the present administration of the service are, roughly, (1) lack of attention to the advice of the Commissioners, (2) favoritism, (3) archaic office methods, (4) lack of interest in trade and commerce, (5) treatment of men returned from the war, (6) excessive power vested in one man.

The present position of the Customs service is admittedly unsatisfactory. To this the FAR EASTERN REVIEW intends to return in a near issue, when the subject will be reviewed and the remedies suggested, as far as it is possible to do so. But was the present pamphlet written with any idea of benefitting the members of the service? Does Mr. Taylor think that pages devoted to the growth of Japanese trade during the war, or the neglect of the British Government to decorate British members of the Customs will help matters? Mr. Taylor deals strongly with the present Inspector General's indifference to questions of trade. If this is so, it is a grievous fault. But we doubt if it would be more politic, as Mr. Taylor suggests, for the Inspector General to obtain the assistance of his Minister to press the Chinese Government on the subject of likin dues. Likin dues are a curse

to the country which the Central Government cannot, if it would, throw off, because it cannot quiet provincial alarm at the prospect of a sudden disappearance of much revenue and patronage with nothing in return. The Foreign Powers have been pressing steadily for sixty years without success. It may be doubted if the Chinese would wish to pay the Inspector General's modest salary to a man who would proceed to touch on a constant source of irritation and would invoke the aid of his Minister to do so.

As to the Inspector General's attitude on the settlement of such questions as duties on exports, we think Mr. Taylor exaggerates the importance of his advice. The late Sir Robert Hart, whose influence was far greater than that of Sir Francis Aglen, was never able to carry suggestions against the wishes of the Government Boards concerned, and with the treasury in its present state of permanent vacuum it is idle to expect such recommendations, if they involve any considerable monetary sacrifice to meet with anything but acceptance for future use.

As to the treatment of the returned soldiers, what Mr. Taylor says is worthy of reproduction.

Reference having been made to the unsatisfactory handling of the staff, it is advisable to avoid the suspicion that such criticism may be the outcome of a sense of personal grievance and to give some concrete example, which can best be done by describing the deplorably unsympathetic and unfair treatment of the men who have come back from the front. When war was declared in Europe, such members of the Service as were liable to military duty under the laws of their respective countries had to leave China, and a number of British members volunteered. China being neutral at the time, all such members had, of course, to resign from the Customs and were paid up to the date of being relieved from duty. A great deal of inconvenience naturally resulted as the offices were left short-handed. The Legations of the Continental Powers take a great interest in seeing that their countries are adequately represented in the personnel of the Service, and this interest, combined with the difficulties experienced by the Inspector-General, led to many of the men at the front being released from their military obligations and ordered to return to China. Of the British subjects only those who have been wounded or invalided have returned. Some of those of other nationalities who have come back also bear the marks of the conflict, and many of our gallant colleagues have offered up the supreme sacrifice. There is a very strong feeling throughout the Service that men who have been fighting for us, and incidentally for China, are entitled to exceptionally favorable treatment, and just indignation is felt at the ignoble attitude adopted by the Inspectorate. It is necessary to explain that when an employee is returning to China from furlough he is allowed half his own passage and (provided that he is accompanied by such encumbrances) half passages for his wife, three children and their attendant. When coming to China for the first time, a newly appointed assistant is given £100 to cover his passage and outfit expenses. The men from the front, however, receive nothing, and only those of them who have private means were able to bring out their families, while some had to borrow from friends. So strong was the feeling that something should be done for them that a committee representing the various branches of the Service was called together and forwarded a remonstrance to the Inspector-General, pointing out especially that these men had been trained in Customs work and were acquainted with Chinese, whereas new men to whom the £100 is paid for passage and outfit have everything to learn. Seeing that the Inspector-General has saved the salaries of the men for so long, it was felt that he could well spare the sum

required to defray their passages. The only concession, however, that could be obtained from the Inspector-General was that he was willing to *lend* the amount for passage to such as were without funds, in return for a promissory note undertaking to repay the same. This concession did not excite exuberant gratitude: on the contrary, it was regarded as an offensive offer of charity to men who were too proud to accept it. It will naturally be supposed that the grievances of the returned men were ended with the refusal to pay their return passages; but there is more and worse to follow. They have actually been made to lose seniority; for, instead of their names being put back in the list between the two men who appeared above and below them before they resigned, they have been put back into their old class, with the result that numbers of men have passed over their heads. Nor is this all, for the time spent at the front is not to count towards the retiring allowance, which is earned every seven years, and their next claim for furlough must allow for the time spent away from China. In short, their period of service at the front is regarded as time wiped out from their Customs career. It is impossible to guess at the considerations that have induced the Inspector-General to adopt so antagonistic an attitude towards the men who have been fighting against Germany and whom all their colleagues admire and respect. None would have grudged them even special promotion, and the Inspector-General appears to have forgotten that since August 1917 they have been fighting China's battle and giving to the Chinese Government service infinitely more arduous than the work in a Custom House. To save their pay and then to make more money out of them by refusing to pay their return passages and by postponing the issue of their retiring allowances, to humiliate them by offering them charity, and to pass other men over their heads, strikes every member of the Service as only too consistent with the harshly pedagogic and partial spirit in which the staff is now handled. It must be thoroughly understood that in his dealings with the staff the Inspector-General is invested with absolute and irresponsible power, and that the bestowal or withholding of pay or allowances are subject to his judgment or caprice. He could, if he chose, give these men their passages; he could place them in the positions they would have held but for their time at the front, and he could allow the period spent abroad to count towards their retiring allowances, just as ordinary long leave counts. This is what it is universally agreed he ought to have done, and the fact that he has not done so throws an illuminating light on his attitude towards his helpless subordinates. That he can be generous out of Service funds, when inclination leads him, is shown by his granting an extra Hk. Tls. 7,500 to a member of the staff by giving him an extension of six months' leave on full pay; the rule being that all extensions must be without pay. He has declared officially that he does not recognize claims based on precedent. It would not appear necessary to support with further examples the assertion that the members of the Service, that is those members who are not specially selected for preferential treatment, have cause for grave dissatisfaction.

If this is an accurate statement of the case it seems that some immediate action should be taken to right such a state of affairs.

The question of the lack of attention to the views of the Commissioners cannot be judged by the outside public. It could only be resolved by getting the opinion of each member of the Commission and testing a few specific cases. Such a process could not be submitted to by the chief of any service. It would be difficult to find any two men in the position of subordinate and superior when one did not feel ill used. Nobody has ever accused Sir Francis Algen of tact or consideration for other peoples' feelings, and it would require much tact to control ports far distant from Peking with harmony, especially when a policy of centralization is carried to its extreme limits and small local questions are settled a thousand miles away by people who have never been to the place in question.

Favoritism is a charge easily made and not easily rebutted. Mr. Taylor gives no more definite proof than the statement that it is felt to exist. The charge of archaic office methods is more definite. The Inspector General works in a separate office from his

staff, with no telephone, and anyone wishing to take work over to him has to walk the quarter of a mile which separates the Inspector-General's house from the Inspectorate offices. This has to be done in any weather, and it is probable that the installation of telephones would be a great convenience, if the prestige of the position did not prevent the dictates of consideration and common sense from being attended to. The statement that no stenographers are employed can hardly be correct. That these ordinary office accessories are not used is scarcely believable and if true shows a curious disregard of time and money saving inventions. The question of the power of the Inspector General being invested in one man is a large and difficult one. It must be remembered that the Inspector-General is employed by the Chinese Government very much against their own wishes, and any suggestion that can be used in any way to weaken his power will be welcomed. The Maritime Customs is the solitary honestly administered Government department in China and for the one reason that the Chinese are allowed no say in the administration. Were they permitted any say at all the imperceptible trickle would commence and the splendid reputation that the service has gained by so many years of unassailable work would be destroyed. This brings us to another point. The pamphlet says, on page 12, that "on the whole the official funds are honestly administered." If this means anything it means that sometimes they are not, and something that is said on a previous page is perhaps intended to prejudice the reader. We do not for one moment believe that Mr. Taylor can bring any evidence in support of this vague but malicious sentence.

Were Mr. Taylor's pamphlet written in the hope of remedying existing grievances, some of which have been referred to in the FAR EASTERN REVIEW and some in the reviews of Mr. Taylor's pamphlet by other publications, it would have been prompted by a worthy motive, and would, in all probability, have in some measure achieved its object. But there does not seem to be any evidence of any such intention. It is more an attack on the Inspector-General and all associated with him, in which nothing that can in any way cause him annoyance is omitted, regardless of the fairness or wisdom of the means. To suggest that the Inspector-General has in any way permitted anything resembling dishonesty is, we are sure, a safe way of assuring him a large and deserved measure of public support.

To prove by an arrangement of figures that Japanese trade in one year exceeded British has no purpose but to cause difficulty to the administration by tempting the Japanese to renew their demands for more power in the administration of the service. There are no real grounds for such claim. The Germans held the second place for many years and no one can accuse them of not pushing the interests of their own country. The Japanese have, by the accident of the war, and the peculiar character of the support they accorded to their allies, held this place for a brief period. They will have a severe struggle to retain it and when they have proved that they can do so it will be time to consider in what measure their claims exceed those formerly preferred by Germany.

Mr. Taylor thinks that the power of the Inspector-General should be vested in a board. Mr. Taylor cannot have studied the workings of international boards very closely or he would have known that they are more marked by their slowness, their jealousies and petty quarrels than by their efficiency. They are usually unable to settle any but trifling points for fear of complications or because they are affected by outside influences which have nothing to do with the work in hand. They are hotbeds of intrigue.

It would be difficult for the Inspector-General to array the Customs service behind him, but Mr. Taylor can do that for him by writing a second pamphlet.

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THE FAR EASTERN REVIEW

VOLUME XIV, 1918

Subscribers are notified that an index of the contents of Volume XIV, 1918, is now on the press and will be forwarded to those who apply for it. Owing to the scarcity and high cost of paper it will not be issued with each copy.

ENGINEERING, FINANCIAL, AND INDUSTRIAL NEWS

RAILWAYS

Shanghai Tramways.—The following is the Traffic Return of the Shanghai Tramways (Foreign Settlement) for the week ended December 4th, 1918, with figures for the corresponding week last year:—

	1918.
Gross Receipts	\$35,754.55
Loss by currency depreciation ...	8,307.09
Effective Receipts	\$27,447.76
Percentage of loss by currency depreciation	24.44
Car Miles run	79,839
Passengers Carried	1,639,880
	1917
Gross Receipts	\$31,732.11
Loss by currency depreciation ...	6,825.05
Effective Receipts	24,907.06
Percentage of loss by currency depreciation	22.71
Car Miles run	74,903
Passengers Carried	1,445,742

For the week ended December 11th, 1918:—

	1918.
Gross Receipts	\$32,337.51
Loss by currency depreciation ...	7,514.57
Effective Receipts	\$24,822.94
Percentage of loss by currency depreciation	24.59
Car Miles run	76,586
Passengers Carried	1,476,749
	1917
Gross Receipts	\$30,995.24
Loss by currency depreciation ...	6,703.29
Effective Receipts	\$24,291.95
Percentage of loss by currency depreciation	22.89
Car Miles run	76,165
Passengers Carried	1,418,069

For the week ended December 18th, 1918:—

	1918.
Gross Receipts	\$32,787.38
Loss by currency depreciation ...	7,618.33
Effective Receipts	\$25,169.00
Percentage of loss by currency depreciation	24.60
Car Miles run	76,901
Passengers Carried	1,492,801
	1917
Gross Receipts	\$30,966.54
Loss by currency depreciation ...	6,643.77
Effective Receipts	\$24,322.77
Percentage of loss by currency depreciation	22.73
Car Miles run	73,622
Passengers Carried	1,409,148

Receipts of Korean Railways.—The total receipts of the railways in Korea during

November amounted to Y.639,042 in passenger fares and Y.664,237 in freight, making a total of Y.1,353,279. This is an increase of Y.359,474 over the figures for the same period last year.

The Japanese Government Railways Bureau has decided to inaugurate a new system of freight transportation on January 19, 1919, which guarantees the delivery within a fixed period of time of all commodities consigned.

Management of Siberian Railways by Japan and U.S.—The negotiations between Japan and the United States re the management of the Siberian Railways have been in progress and an understanding thereanent seems to have been reached between the two Powers of late. It is said that in the event of order being restored in Siberia, the sphere of influence of both Powers will be defined, subject to the concurrence of the Powers, and that the Amur and Ussuri Railways will be included in the Japanese sphere of influence, and the Chinese Eastern Railway in the U.S. sphere, with the reservation that the Railway will be neutralized permanently.

S.M.R. Co. Rolling Stock.—According to the figures at the end of November, the South Manchuria Railway Co. had the following rolling stock:—Freight cars, 3,600; Passenger cars, 240; Locomotives, 266; Converted cars, 139. Total, 4,245. There are about two hundred freight cars under construction, and a number of locomotives ordered from the United States are expected shortly.

For Improvement of S.M.R. Lines.—The South Manchuria Railway Co. is planning a gigantic improvement in the traffic service of its lines, and especially in reinforcing its rolling stock. For the fiscal year of 1918, Y.10,000,000 was appropriated for the increase of the rolling stock, but in 1919 Y.23,000,000 will be spent in building locomotives and passenger and freight cars. Y.1,000,000 will be also spent in the improvement of tracks.

Shimonoseki-Moji Tunnel Decided On.—The Imperial Japanese Railway Bureau has decided to build the channel-tunnel between Shimonoseki and Moji, which connects Honshu and Kyushu. Construction work is expected to start next year and will be completed in 5 years. According to Mr. Satake, Director of the Bureau of Supervision, the total length of the undersea rail will be approximately 5 miles.

Peking Round City Railway.—The management of the Peking Round City Railway proposes to build two branch lines from the Anting Gate of Peking to Peiyuan, and from the Hsichih Gate to Hsiyuan, respectively. The Peking-Suiyuan Railway Administration, under whose control the round city line is placed, has submitted a memorandum on the subject to the Ministry of Communications. Work

will commence as soon as permission is obtained from the Ministry. The branch lines will be known as the Chin-Yuan Branch Railways.

MINING

Kailan Mining Administration.—The total output of the Administration's mines for the week ended 23rd November amounted to 68,205 tons, and the sales during the same period, to 57,057 tons; for the week ended 30th November the output amounted to 72,610 tons, and the sales during the same period, to 62,170 tons; for the week ended 7th December the output amounted to 74,400 tons, and the sales during the same period, to 58,067 tons; for the week ended 14th December the output amounted to 70,290 tons, and the sales during the same period, to 62,820 tons.

The Seoul Mining Company.—During the month of November the mills on the Suan Concession crushed a total of 15,950 tons of ore resulting in a gross recovery of Yen 215,332. The Talmichung mine developments continue most satisfactorily and the new ore bodies recently discovered are being opened up as quickly as circumstances permit.

INDUSTRIES

Tan-Hua Match Company.—The Tan-Feng Match Company of Peking, started by Mr. Chow Tsz-chi in 1912, obtained from the Government the exclusive manufacturing right in Peking for a stated number of years, during which period no other company can be started in the Capital for the manufacture of matches. Last Spring this company was merged into the Hua-Chang Match Company of Tientsin, and a new company on a bigger scale was organized which is known as the Tan-Hua Company. At a shareholders' meeting, Mr. Chang Sing-wu, formerly Councillor of the Ministry of Agriculture and Commerce, was elected Managing Director of the Company. Mr. Chang Sing-wu is now negotiating with the Government for the transfer of the exclusive manufacturing right of the Tan-Feng Company to the new company, so that the latter may continue to enjoy the right for the unexpired term.

Sino-Japanese Timber Co.—A lumber company with a capital of Y.5,000,000 is reported to have been organized at Chungchun at the joint initiation of Baron K. Okura and Mr. Chou-tzuchi. The company plans to handle the lumber of the Sungari district.

Manchuria-Mongolia Woolen Manufacturing Co.—The subscriptions to the shares of the Manchuria-Mongolia Woolen Manufacturing Company reached 860,000 shares against 15,000 shares offered. It has been decided that one-third of the shares offered will be allotted to the Manchurian subscribers.

Motor Bus Service from Sheungshui.—Some enterprising Chinese has just started a motor bus service from Sheungshui, in the New Territories (Hongkong), to Autau, this mark-

ing a great improvement on the means of communication hitherto available, prehistoric gharries and antiquated rickshas.

New Siberian "Syndicate."—The Eastern Industrial Corporation (Kyokuto Kogyo Dan) has been organized in Japan as the result of the investigations of the Economic Assistance for Siberia Committee for the purpose of systematically supplying goods to the Siberians.

Beet Sugar Factories.—The success of beet cultivation in Manchuria is inducing many sugar manufacturing companies to undertake beet cultivation in Manchuria. The South Manchuria Sugar Refining Company, Moukden, has harvested a far larger quantity of beets this year, and the Company is said to have had a very profitable year. The Company will increase the area of beet cultivation and annual productions. The Imperial Sugar Refining Company of Formosa is also planning to operate in South Manchuria.

Enterprises of the S.M.R.—The South Manchuria Railway Co., in addition to the many industrial and other enterprises conducted under Government orders, inclusive of railway and steamship transportation, warehousing, hostelry, gas, electricity, coal mining and sales and sundry auxiliary enterprises at the Fushun Collieries, management of the South Manchuria Railway Area with hospitals, schools, etc., are now interested in eighteen other corporations to the total extent of ¥12,000,000, as are tabulated under:—

Electricity Works.—At Wafangtien, Tashihchiao, Ssuningkai, Kungchuling, Yingkoa, Liaoyang, and Tiehling.

Market Places.—At Fushun, Moukden, and Changchun.

Exchanges.—At Changchun and Faiyuan.

Industrial Enterprises.—Dairen Oil and Fat Industry Co., Harbin Flour Mill, and South Manchuria Development Co.

Mining.—South Manchuria Mining Co.

Communications.—Penchihu Light Rail Co., Changchun Transportation Co., and Dairen Steamship Co.

Warehousing.—Kirin Warehousing Co.

With the recent reorganization of the S.M.R. Co. staff, the different business companies in which the Railway Company is interested, have been placed under respective Departments as under:—

Under Land Department.—Yingkou Waterworks and Electricity Co.; Dairen Oil and Fat Industry Co.; Penchiu-Chienchung Light Railway Co.; Changchun Exchange; Kaiyuan Exchange; Electric Light Companies at Liaoyang, Tiehling, Wafangtien, Tashihchiao, Kungchuling, and Ssuningkai; North Manchuria Flour Mill; Changchun Market Place; Moukden Market Place; South Manchuria Sugar Refining Co.; South Manchuria Development Co.

Under S.M.R. Co. Dairen Railway Office.—Dairen Steamship Co.; Changchun Forwarding Co.

Under Mining Department.—Chenhsing Mining Co. (connected with Anshan Steel Works).

The Niigata Iron Works has just purchased the patent owned by a British machine works of manufacturing Diesel engines. The company is raising the funds required for the buildings of works for Diesel engines and other internal combustion engines through the issue of new shares representing ¥3,000,000.

Crude lacquer had been imported by Japan from China to the value of ¥1,100,000 up to the close of November whereas before the war

an annual import was only ¥670,000. The best grade is now quoted at Tls. 90 per picul. The lowest grade is quoted at Tls. 60 per picul.

Chihli Laboratory to be Extended.—The Provincial Assembly of Chihli passed a resolution whereby some \$120,000 was appropriated for the extension of the Chihli Industrial Laboratory. The analytical department is equipped to handle chemical analysis of various ores, food, water and medicine. The other two departments are devoted to the experiments of different industries, such as leather, paper, pottery, etc.

Cocoon Oil.—The little barrio of Recodo on the shores of Caldera Bay, about eight miles from Zamboanga, is destined to be one of the most important points in the southern archipelago and the centre of Mindanao's coconut oil industry. The Zamboanga Oil Company which was organized several months ago, hopes to have all the machinery installed and the mill producing oil before the end of January. In anticipation the Zamboanga Oil Company has been buying large quantities of copra during the past months and the result is that the company now has on hand and ready to put through the mill over P.400,000 worth of copra.

Caldera Bay is an ideal location for an oil mill. The largest ships afloat can tie up at the doors of the warehouses and discharge copra and the large tank steamers can be loaded with oil through pipe lines not fifty yards from the storage tanks. No expensive piers are necessary as there is over thirty feet of water within fifty feet of the beach.

The Tokyo Electric Light Company.—The Tokyo Electric Light Company netted a profit of ¥3,315,000 during the latter semi-annual term, showing an increase of ¥140,000 over the preceding six months.

A new canvas manufacturing company named the Yokohama Hampu Kaisha was organized in Yokohama on November 29 with a capital of ¥1,500,000.

FINANCIAL

National Budget for 1919-1920.—The Japanese national budget for the next fiscal year 1919-1920 was outlined by the Government to the public on December 3. The revenues are estimated at 1,037 million yen and the expenditures at 1,058 million yen; the deficit amounting to 21 million yen. These figures show an increase of 214 million yen in revenues and of 235 million yen in expenditures as compared with the budget of the current year.

Cost of Civil War.—An estimate prepared by the Peking Military Council is to the effect that the military expenditure incurred in China to the end of November amounts to the enormous total of \$125,000,000, sixty per cent. of which was spent by the North and forty per cent. by the South.

Customs Surplus to be Handed Over.—It appears that the Chinese Maritime Customs recently estimated that there would be a surplus of some Shanghai Tls. 2,600,000 at the end of the year. The estimate was based on returns for the first nine months and estimates

for the remaining period. The Chinese Government applied for Tls. 2,500,000, and as the Government is hard pressed for funds, or will be very shortly, it is expected that this temporary accommodation will be afforded.

Sino-Japanese Telephone Loan.—The Telephone Loan concluded between the Chinese Government and the Sino-Japanese Enterprise Co., Tokyo, was signed on October 15th, and for some reason the details were not made public until recently. According to what has been announced, the loan was made on the following conditions:—

1. The amount of the loan is Tls. 10,000,000 including the loan made in 1916 amounting to Tls. 3,000,000.

2. The loan is to be used exclusively for the extension of the telephone service and for constructing new lines.

3. The term of the loan is three years.

4. The net amount to be received by the Chinese Government is Tls. 9,770,000.

5. The interest is 8 per cent. per annum.

The interest of the original Tls. 3,000,000 loan was 7 per cent., and the nett price 95, which terms were altered to the above. It is further agreed that the loan shall not be used for any political purpose, and the amount of the loan shall be held by the Japanese firm to be paid only when the use of funds has been ascertained.—"Manchuria Daily News."

MISCELLANEOUS

Improvement at Canton.—The ancient city wall of Canton some seven miles in circumference, averaging 30 ft. in height and 20 ft. in thickness, is being torn down, and avenues will be constructed in its place. Another avenue, running from the Bund southward to the heart of the city, is being worked out.

A corporation with a capital of \$3,000,000 is being organized to procure the city tramway concession, some foreigners having already approached Chan Lim-pak, a well-known Cantonese merchant who leads the project, for shares in the proposed corporation. To look after the breaking down of the wall and other city improvements, a Directorate of Municipal Affairs has been created by the Provincial Government with Yang Wing-tai and Ngai Bong-ping, Commissioners of Finance and Police respectively, as directors. It is expected that there will some day be a Municipal Council composed of leading residents of the city.

To finance the improvements, the public lands formerly belonging to the Eighth Banner, a class of Manchus with special privileges under the old Ta Ching Dynasty, will be sold. Mr. H. L. Wu, C.E., a graduate of the University of Illinois, for a time in the service of the Provincial Government as acting chief engineer to the then Bureau of Public Works, is now supervising the construction work for the Directorate of Municipal Affairs. Of course, the Cantonese are mostly interested in the present improvements; but the non-Cantonese militarists controlling the provincial affairs, nevertheless, are also supporting the enterprise.

Another public improvement to be taken up soon will be the betterment of the approaches to the Canton Harbor. Foreigners having business with Canton, such as the merchants of Hongkong, are also deeply interested in the project. According to the Kuangtung Board of Conservancy Works, it will take less than \$3,000,000 to effect the improvement.

Supplement to the "Far Eastern Review," January, 1919

Draft of China's Revised
TARIFF

**The following is the Draft of the Chinese Tariff as Revised by the Tariff Revision Commission—
which completed its labours on December 20—and sent to the Ministers in Peking for
submission to their home Governments for ratification:—**

COTTON AND COTTON GOODS.

Name of Article	Agreed Value		Proposed Duty Rate	
	Per	Hk. Tls.	Hk. Tls.	
Cotton Piece Goods, Grey:—				
Grey Shirtings and Sheetings, not over 40-in. by 41 yards:				
(a) Weight 7-lb. and under	piece	1.817	0.091	
(b) Weight over 7-lb. and not over 9-lb.	"	2.681	0.13	
(c) Weight over 9-lb. and not over 11-lb.	"	3.530	0.18	
Grey Shirtings and Sheetings, not over 40-in. by 41 yards and with more than 110 threads per square inch:				
(a) Weight over 11-lb. and not over 12½-lb.	piece	3.933	0.20	
(b) Weight over 12½-lb. and not over 15½-lb.	"	4.668	0.23	
(c) Weight over 15½-lb.	"	5.400	0.27	
Grey Shirtings and Sheetings, not over 40-in. by 41 yards and with 110 threads or less per square inch:				
(a) Weight over 11-lb. and not over 15½-lb.	piece	3.293	0.16	
(b) Weight over 15½-lb.	"	4.000	0.20	
Drills and Jeans, Grey, not over 31-in. by 31 yards	"	2.960	0.15	
Drills and Jeans, Grey, not over 31-in. by 41 yards:				
(a) Weight 12½-lb. and under	piece	3.900	0.20	
(b) Weight over 12½-lb.	"	3.215	0.16	
T-Cloths, Grey, not over 34-in. by 25 yds.:				
(a) Weight 7-lb. and under	piece	1.722	0.086	
(b) Weight over 7-lb.	"	2.312	0.12	
T-Cloths, Grey, over 34-in. but not over 37-in. by 25 yards	"	2.900	0.15	
Imitation Native Cotton Cloth (including Machine-made), Grey, not over 24-in. wide and with not more than 110 threads per square inch	picul	32.400	1.60	
Cotton Flannel or Flannelette of Plain or Twill Weave, Grey:				
(a) Not over 32-in. by 31 yards	piece	3.484	0.17	
(b) Over 32-in. but not over 40-in. by 31 yards	"	4.800	0.24	
Cotton Piece Goods, White or Dyed— (irrespective of finish):—				
Plain White Shirtings and Sheetings, not over 37-in. by 42 yards	piece	4.183	0.21	
White Irishes, not over 37-in. by 42 yards	"	5.096	0.25	
Drill and Jeans, White, not over 31-in. by 32 yards	"	3.296	0.16	
Drills and Jeans, White, not over 31-in. by 42 yards	"	4.348	0.22	
T-Cloths, White, and Mexicans, not over 32-in. by 41 yards	"	3.614	0.18	
Dimities, Piqués, Vestings, Quiltings, and Bedford Cords, White, not over 30-in. by 30 yards	"	4.749	0.24	
Cambrics, Lawns, and Muslins, White, Plain, not over 46-in. by 12 yards	"	0.810	0.041	
Cambrics, Lawns, and Muslins, White, Figured, not over 46-in. by 12 yards	value	5 per cent.	—	
Cambrics, Lawns, and Muslins, Dyed, Plain or Figured, not over 46-in. by 12 yards	"	5 per cent.	—	
White or Dyed Plain or Figured Muslins, Lawns, Cambrics, Limbrics, Pongees, Brocades, and Striped, Spotted, Corded, and Figured Shirtings:				
(a) Not over 30-in. by 31 yards	piece	4.443	0.22	
(b) Over 30-in. but not over 37-in. by 42 yards	"	5.000	0.25	
Lenos, White or Dyed, not over 31-in. by 30 yards	"	2.161	0.11	
Leno Brocades, White or Dyed	value	5 per cent.	—	
Dyed Shirtings and Sheetings, Plain:				
(a) Not over 30-in. by 33 yards	piece	2.7555	0.14	
(b) Not over 30-in. and over 33 yards but not over 43 yards	"	3.5905	0.18	
(c) Not over 36-in. by 21 yards	"	2.1048	0.11	
(d) Not over 36-in. and over 21 yards but not over 33 yards	"	3.30759	0.17	
(e) Not over 36-in. and over 33 yards but not over 43 yards	"	4.30989	0.22	
Dyed Drills and Jeans, Plain:				
(a) Not over 31-in. by 33 yards	"	3.600	0.18	

Name of Article	Agreed Value		Proposed Duty Rate	
	Per	Hk. Tls.	Hk. Tls.	
(b) Not over 31-in. and over 33 yards but not over 43 yards...	piece	4.676	0.23	
Dyed T-Cloths, Embossed Cantons, Alpaccanos, Real and Imitation Turkey Reds, not over 32-in. by 32 yards:				
(a) Weight 3¼-lb. and under	piece	1.889	0.094	
(b) Weight over 3¼-lb. but not over 5¼-lb.	"	2.400	0.12	
(c) Weight over 5¼-lb.	"	3.320	0.17	
25 Mercerised Crimps, White, Dyed, or Printed, Plain or Figured, not over 32-in. by 32 yards	"	5.478	0.27	
Oatmeal Crape, White or Dyed, Plain or Figured, not over 33-in. by 33 yards	"	5.265	0.26	
27 Cotton Crape (excluding Oatmeal Crape), Grey, Bleached, Dyed, Printed, or Dyed in the Yarn:				
(a) Not over 15-in. wide	value	5 per cent.	—	
(b) Over 15-in. but not over 30-in. wide	yard	0.106	0.0053	
Lastings, Italians, Satteens, Ribs, Cords, Moreens, Beatrice Twills, Tientsin Twills, Satteen Drills, Satteen Stripes, Repps, and Imitation (Weft-faced) Venetians, White or Dyed, Plain or Figured, not over 33-in. by 33 yards	piece	4.540	0.23	
Poplins and Venetians, White or Dyed, Plain, not over 33-in. by 33 yards	"	8.0946	0.40	
Poplins and Venetians, White or Dyed, Figured, not over 33-in. by 33 yards	"	10.000	0.50	
31 Cotton Flannel or Flannelette of Plain or Twill Weave:				
(1) White, Dyed, or Printed, or Dyed in the Yarn, exclusive of Duplex or Reversible Prints:				
(a) Not over 25-in. by 15 yards	piece	1.400	0.07	
(b) Over 25-in. but not over 30-in. by 15 yards	"	1.700	0.085	
(c) Over 25-in. but not over 30-in. by 31 yards	"	3.600	0.18	
(d) Over 30-in. but not over 36-in. by 15 yards	"	2.000	0.10	
(e) Over 30-in. but not over 36-in. by 31 yards	"	4.300	0.22	
(2) Duplex or Reversible Prints	value	5 per cent.	—	
Dyed Cotton Spanish Stripes:				
(a) Not over 32-in. by 20 yards	piece	2.241	0.11	
(b) Over 32-in. but not over 64-in. by 20 yards	"	4.432	0.22	
Dyed Cotton Velvets and Velveteens, Plain, not over 26-in. wide	yard	0.2884	0.014	
34 Cotton Velvets, and Velveteens, Printed, Figured, or Embossed, Velvet and Velveteen Cords, Corduroys, Fustians, Moleskins, and Plushes	value	5 per cent.	—	
35 Canvas, Cotton (including Cotton Duck), for Sails, etc.	yard	0.300	0.015	
36 Stockinet or Knitted Tissue:				
(a) Raised	picul	44.000	2.20	
(b) Not Raised	value	5 per cent.	—	
Cotton Piece Goods, Printed:—				
37 Printed Cambrics, Printed Lawns, Printed Muslins, Printed Shirtings, Printed Sheetings, Printed T-Cloths (including those known as Blue and White Printed T-Cloths), Printed Drills, Printed Jeans, Printed Diagonal Twills, Twill Cretonnes, Printed Silesias, Printed Repps (excluding Repp Cretonnes):				
(a) Not over 20-in. wide	value	5 per cent.	—	
(b) Over 20-in. but not over 46-in. by 12 yards	piece	1.020	0.051	
(c) Over 20-in. but not over 32-in. by 30 yards	"	2.302	0.12	
(d) Over 32-in. but not over 42-in. by 30 yards	"	3.094	0.15	
Printed Mercerised Crimps. See No. 25.				
Printed Oatmeal Crape and Oatmeal Crape Cretonnes, not over 32-in. by 30 yards	piece	2.705	0.14	

Name of Article	Agreed Value		Proposed Duty Rate	
	Per	Hk. Tls.	Hk. Tls.	
Printed Cotton Crape. See No. 27.				
Printed Turkey Reds, Real and Imitation, not over 31-in. by 25 yards ...	piece	2.063	0.10	
Printed Lenos, not over 31-in. by 30 yards	"	2.350	0.12	
Printed Satteens and Satinets, Printed Brocades (including Printed Fancy Woven Stripes or Checks), Printed Italians, Printed Damasks, Printed Venetians, Printed Lastings, Printed Beatrice Twills, Printed Cords, Printed Poplins, Printed Moreens, not over 32-in. by 30 yards ...	"	5.000	0.25	
Printed Flannelette. See No. 31.				
Duplex or Reversible Prints of Shirting Weave and one colour only, not over 32-in. by 30 yards ...	piece	3.000	0.15	
Printed Velvets and Velveteens. See No. 34.				
Printed Domestic Cretonnes, Printed Satteen Cretonnes, Printed Repp Cretonnes, Printed Embossed Figures, Printed Art Muslins and Casement Cloth, Printed Cotton Coatings, Trouserings, and Gabardines, and all other Duplex or Reversible Prints except those enumerated in Classes 37 and 42 ...	value	5 per cent.	—	
Printed Blankets. See No. 45.				
Printed Handkerchiefs. See No. 48.				
The term "Printed" in this Tariff includes Pigment Style, Direct Printing Style, Steam Style, Discharge Style, Madder or Dyed Style, Resist Style, Resist Pad Style, Metal Style, and so forth, irrespective of finish.				
The term "Duplex or Reversible Print" in this Tariff includes all Printed Cottons having (a) a different pattern printed on each side of the cloth; (b) the same design on both sides of the cloth, whether printed with one or more rollers.				
Cotton Piece Goods, Yarn-dyed:—				
Cotton Crape. See No. 27.				
Cotton Flannel, or Flannelette. See No. 31.				
Stockinet. See No. 36.				
Not otherwise enumerated ...	value	5 per cent.	—	
Cotton Piece Goods, not otherwise enumerated ...				
Cotton, Raw; Cotton Thread, Cotton Yarn, and Goods made of Cotton:—				
Ankle Bands, Plain or Decorated ...	picul	80.000	4.00	
Bags, New. See No. 529 ...	"	40.000	2.00	
Blankets, Plain, Printed, or Jacquard (including those with a taped or whipped edge of Silk or other material), and Blanket Cloth ...	picul	40.000	2.00	
Canvas. See No. 35.				
Crape. See No. 27.				
Counterpanes, Honeycomb or Alhambra:				
(a) Not over 2½ yards long ...	"	45.000	2.25	
(b) Over 2½ yards long ...	value	5 per cent.	—	
Embroidered Edging or Insertion, Machine-made ...	"	5 per cent.	—	
Flannelette. See No. 31.				
Handkerchiefs, neither Embroidered nor Initialled:				
(1) White, Dyed, or Printed, Hemmed (but not with a drawn-thread hem):				
(a) Not over 13-in. square ...	dozen	0.220	0.011	
(b) Over 13-in. square but not over 18-in. square ...	"	0.360	0.018	
(c) Over 18-in. square but not over 30-in. square ...	"	0.530	0.027	
(2) White, Dyed, or Printed, with drawn-thread hem:				
(a) Not over 13-in. square ...	dozen	0.360	0.018	
(b) Over 13-in. square but not over 18-in. square ...	"	0.750	0.033	
(c) Over 18-in. square but not over 30-in. square ...	"	0.920	0.046	
(3) Printed Handkerchiefs, Unhemmed:				
(a) Not over 18-in. square ...	dozen	0.190	0.01	
(b) Over 18-in. square but not over 25-in. square ...	"	0.640	0.032	
(c) Over 25-in. square but not over 29-in. square ...	"	0.800	0.04	
(d) Over 29-in. square but not over 34-in. square ...	"	1.030	0.052	

Name of Article	Agreed Value		Proposed Duty Rate	
	Per	Hk. Tls.	Hk. Tls.	
Knitted Clothing, Raised (including that stitched with Silk Thread and with facings of Silk or other material) ...	picul	74.000	3.70	
Raw Cotton ...	"	16.000	0.80	
Singlets or Drawers, not Raised (including those stitched with Silk Thread and with facings of Silk or other material)	dozen	2.800	0.14	
Socks and Stockings:				
(a) Not Raised on either side:				
(1) Made of Ungassed or Unmercerised Thread ...	picul	70.000	3.50	
(2) Made of Gassed or Mercerised Thread or stitched or embroidered with Silk ...	"	150.000	7.50	
(b) Raised ...	value	5 per cent.	—	
(c) Others ...	value	5 per cent.	—	
Stockinet. See No. 36.				
Towels:				
(a) Turkish ...	picul	50.000	2.50	
(b) Honeycomb or Huckaback ...	"	44.000	2.20	
Thread, Dyed or Undyed (irrespective of finish):—				
(1) Sewing Cotton:				
(a) In balls or skeins:				
3-cord ...	picul	100.000	5.00	
6-cord ...	"	190.00	9.50	
(b) On spools or cops:				
2-cord, 50 yards or less ...	gross	0.586	0.029	
3-cord, 50 yards or less ...	"	0.786	0.039	
6-cord, 50 yards or less ...	"	1.458	0.073	
Other lengths in proportion.				
(2) Crochet or Embroidery Cotton, in skeins or balls ...	picul	82.449	4.10	
Waste Cotton ...	"	9.600	0.48	
Yarn:—				
(1) Grey (irrespective of fold):				
(a) Counts up to and including 17 ...	picul	25.500	1.28	
(b) Counts above 17 and up to and including 23 ...	"	27.663	1.38	
(c) Counts above 23 and up to and including 35 ...	"	33.000	1.90	
(d) Counts above 35 and up to and including 45 ...	"	43.600	2.18	
(e) Counts above 45 ...	value	5 per cent.	—	
(2) Dyed, Bleached, Gassed, Mercerised, etc. ...	"	5 per cent.	—	

WOOL, SILK, LINEN AND HEMP GOODS.

Flax, Hemp and Jute Goods:—

57	Gunny Bags, New ...	picul	8.480	0.42
58	Gunny Bags, Old ...	value	5 per cent.	—
	Hemp ...	picul	14.000	0.70
60	Hemp or Hessian Bags, New ...	"	18.900	0.95
61	Hemp or Hessian Bags, Old ...	value	5 per cent.	—
	Hessian Cloth ...	picul	18.000	0.90
	Canvas of Hemp and Jute for Sails, etc.	yard	0.38165	0.019
	Canvas Linen (elastic), for Tailoring ...	value	5 per cent.	—
	Tarpaulin of Hemp or Jute ...	yard	0.229	0.011

Silk Goods and Silk Mixtures:—

	Silk Piece Goods (all Silk), Plain, Figured, or Brocaded ...	value	5 per cent.	—
	Silk Plushes and Silk Velvets, Pure ...	catty	10.984	0.55
	Silk Seal, with Cotton back ...	"	2.9418	0.15
	Silk Socks and Stockings, Knitted (including those made of Artificial Silk)*	"	7.000	0.35
	Silk Mixture Plushes and Velvets (i.e., made of Silk mixed with other fibrous material, with Cotton back) ..	"	2.6537	0.13
	Silk and Cotton Satins, White or Dyed in the Piece*:			
	(a) Plain ...	catty	2.533	0.13
	(b) Figured ...	"	3.233	0.16
	Silk and Cotton Satins, Dyed in the Yarn* ...	"	1.000	0.20
	Silk and Cotton Mixtures not otherwise enumerated ...	value	5 per cent.	—
	Silk Ribbons, all Silk and Mixtures ...	value	5 per cent.	—

Wool and Cotton Unions:—

	Union Shirtings, not over 33-in. wide ...	yard	0.4853	0.024
	Cloth made of remanufactured Wool and Cotton, such as Meltons, Vicunas, Beavers, Army Cloths, Union Cloths, Leather Cloths, Presidents (including Cloth containing a small quantity of new Wool for facing purposes), not over 56-in. wide ...	"	0.800	0.04

* The French Delegation stated that it could not agree to the duty treatment proposed for these goods until it had referred the question to its Government.

Name of Article	Agreed Value		Proposed Duty Rate	
	Per	Hk. Tls.	Hk. Tls.	
Italian Cloth, Plain or Figured, Alpacas, Lustres, Orleans, and Sicilians ...	value	5 per cent.	—	
Wool and Woollen Goods:—				
Wool, Sheep's ...	picul	17.000	0.85	
Blankets and Rugs ...	pound	0.560	0.028	
Bunting, not over 24-in. by 40 yards ...	piece	6.560	0.33	
Camlets, not over 31-in. by 62 yards ...	"	15.500	0.78	
Flannel, not over 33-in. wide ...	yard	2.450	0.024	
Lastings, Plain, Figured, or Crêped, not over 31-in. by 32 yards ...	piece	14.620	0.73	
Llama Braid ...	picul	150.000	7.50	
Long Ells, not over 31-in. by 25 yards ...	piece	6.657	0.33	
Russian, Broad, Superfine, Medium, and Habit Cloth, not over 76-in. wide ...	yard	1.520	0.076	
Spanish Stripes, not over 64-in. wide ...	"	0.636	0.032	
All Woollen and Worsted Yarn and Cord, including Berlin Wool ...	picul	120.000	6.00	
METALS.				
Aluminium ...	value	5 per cent.	—	
Aluminium Sheets ...	value	5 per cent.	—	
Antifriction Metal ...	value	5 per cent.	—	
Antimony Regulus and Refined ...	picul	14.000	0.70	
Antimony Ore ...	value	5 per cent.	—	
Brass and Yellow Metal:—				
Bars and Rods ...	picul	30.183	1.50	
Bolts, Nuts, Rivets, Washers, and Accessories ...	value	5 per cent.	—	
Ingots ...	picul	30.183	1.50	
Nails ...	"	36.765	1.80	
Old (fit only for remanufacture) ...	value	5 per cent.	—	
Screws ...	value	5 per cent.	—	
Sheets and Plates ...	picul	30.183	1.50	
Tubes ...	"	47.809	2.40	
Wire ...	picul	30.183	1.50	
Copper:—				
Bars and Rods ...	picul	33.950	1.70	
Bolts, Nuts, Rivets, and Washers ...	value	5 per cent.	—	
Ingots and Slabs ...	picul	28.000	1.40	
Nails ...	picul	47.385	2.40	
Old (fit only for remanufacture) ...	value	5 per cent.	—	
Sheets and Plates ...	picul	33.950	1.70	
Tacks ...	value	5 per cent.	—	
Tubes ...	value	5 per cent.	—	
Wire ...	picul	33.950	1.70	
Wire Cable ...	value	5 per cent.	—	
Wire Rope ...	value	5 per cent.	—	
Iron and Steel, Ungalvanized (not including Bamboo, Spring, and Tool Steel):—				
Anvils, Swage-blocks, Anchors, and Parts of, and Forgings (each weighing in every case 25-lb. or over) ...	picul	11.484	0.57	
Bolts, Nuts, and Washers ...	value	5 per cent.	—	
Castings, Rough ...	picul	5.132	0.26	
Chains, and Parts of ...	"	7.667	0.38	
Cobbles, Wire Shorts, Defective Wire, Bar Croppings, and Bar Ends, Galvanized or Ungalvanized ...	"	2.658	0.13	
Crossings for Railways ...	value	5 per cent.	—	
Fish-plates and Spikes ...	value	5 per cent.	—	
Hoops ...	picul	5.451	0.27	
Old (fit only for remanufacture) ...	picul	1.946	0.10	
Nail-rod, Bars, Twisted or Deformed Bars, Tress, Channels, Angles, Joists, Girders, and other Structural Sections or Shapes ...	"	4.080	0.20	
Nails, Wire and Cut ...	"	5.946	0.30	
Pig and Kentledge ...	"	2.000	0.10	
Pipes, Tubes, and Pipe and Tube Fittings	value	5 per cent.	—	
Plate Cuttings ...	picul	2.311	0.12	
Rails ...	"	3.120	0.16	
Rivets ...	"	6.287	0.31	
Screws ...	value	5 per cent.	—	
Sheets and Plates $\frac{1}{2}$ of an inch thick or more ...	picul	4.000	0.20	
Sheets and Plates under $\frac{1}{2}$ of an inch thick	"	5.000	0.25	
Tacks ...	"	9.047	0.45	
Wire ...	"	5.241	0.26	
Wire Rope, Galvanized or Ungalvanized...	"	14.924	0.75	
Wire with or without fibre core ...	"			
Steel, Tool and Spring:—				
Bamboo Steel ...	picul	5.496	0.27	
Spring Steel ...	"	6.420	0.32	
Tool Steel (including High-speed Steel)	value	5 per cent.	—	
Iron and Steel, Galvanized:—				
Bolts, Nuts, Rivets, and Washers...	value	5 per cent.	—	
Pipes, Tubes, and Tube Fittings ...	"			
Screws ...	"			
Sheets, Corrugated and Plain ...	picul	7.400	0.37	
Wire ...	"	6.072	0.30	

Name of Article	Agreed Value		Proposed Duty Rate	
	Per	Hk. Tls.	Hk. Tls.	
Wire Rope. See Ungalvanized.				
Wire Shorts. See Ungalvanized.				
Iron and Tin Dross ...	picul	6.000	0.30	
Lead:—				
Old (fit only for remanufacture) ...	value	5 per cent.	—	
Pigs or Bars ...	picul	9.000	0.45	
Pipe ...	"	9.961	0.50	
Sheet ...	"	11.834	0.59	
Wire ...	value	5 per cent.	—	
Manganese ...	"			
Manganese Ferro ...	"			
Nickel ...	picul	70.000	3.50	
Quicksilver ...	"	126.654	6.30	
Tin:—				
Compound ...	value	5 per cent.	—	
Dross and Refuse ...	picul	10.385	0.54	
Ingots and Slabs ...	"	45.462	2.30	
Pipe ...	value	5 per cent.	—	
Sheet ...	picul	41.208	2.10	
Tinned Tacks ...	"	9.047	0.45	
Tinned Plates, Decorated ...	"	10.176	0.51	
Tinned Plates, Plain ...	"	7.800	0.39	
Tinned Plates, Old ...	value	5 per cent.	—	
Type Metal ...	"			
White Metal or German Silver:—				
Bars, Ingots, and Sheets ...	picul	54.531	2.70	
Wire ...	"	43.444	2.20	
Zinc:—				
Powder and Spelter ...	picul	12.945	0.65	
Sheets (including Perforated), Plates, and Boiler Plates ...	"	16.549	0.84	

FOOD, DRINK AND MEDICINE.

Fishery and Sea Products:—

Agar-agar ...	picul	6.000	0.30
Awabi, in bulk ...	"	52.500	2.60
Bicho de Mar, Black, Spiked ...	"	53.300	2.70
Bicho de Mar, Black, not Spiked ...	"	40.000	2.00
Bicho de Mar, White ...	"	20.500	1.00
Cockles, Dried ...	"	13.822	0.69
Cockles, Fresh ...	"	1.200	0.06
Compy ...	"	43.000	2.15
Crabs' Flesh, Dried ...	"	16.518	0.83
Fish Bones ...	value	5 per cent.	—
Fish Cod, Dried ...	picul	5.900	0.29
Fish, Cuttle ...	"	13.600	0.68
Fish, Dried and Smoked (not including Dried Codfish and Cuttle-fish) ...	"	9.739	0.49
Fish, Fresh ...	"	6.410	0.32
Fish, Maws, 1st Quality (i.e., weighing 1 catty or over per piece) ...	catty	5.000	0.25
Fish, Maws, 2nd Quality (i.e., weighing under 1 catty per piece) ...	picul	56.500	2.80
Fish, Salmon Bellies ...	value	5 per cent.	—
Fish, Salt ...	picul	3.600	0.18
Fish, Skin ...	"	12.711	0.64
Mussels, Oysters, and Clams, Dried ...	"	16.000	0.80
Prawns and Shrimps, Dried, in bulk ...	"	22.000	1.10
Seaweed, Cut ...	"	3.334	0.17
Seaweed, Long ...	"	2.500	0.13
Seaweed, Prepared ...	"	26.000	1.30
Seaweed, Red ...	value	5 per cent.	—
Sharks' Fins, Dorsal and Tail ...	picul	28.650	4.40
Sharks' Fins, Breast Fins ...	"	37.173	1.90
Sharks' Fins, Prepared ...	"	128.562	6.40
Seaweed Skins ...	value	5 per cent.	—

Animal Products, Canned Goods, and

Groceries:—

Bacon and Hams, in bulk ...	picul	35.300	1.80
Baking Powder ...	value	5 per cent.	—
Beef, Corned or Pickled, in Barrels ...	"		
Birds' Nests, Black (including Clarified Refuse) ...	catty	3.000	0.15
Birds' Nests, White ...	"	18.000	0.90
Butter ...	picul	53.276	2.70
Canned Goods:			
Asparagus ...	picul	17.500	0.88
(Incl. weight of immediate packing.)			
Awabi ...	"	24.000	1.20
Cream and Milk, Evaporated or Sterilized	"	13.000	0.65
Fruits, Table and Pie ...	picul	14.600	0.73
(Incl. weight of immediate packing.)			
Milk, Condensed ...	"	19.200	0.96

Name of Article	Agreed Value		Proposed
	Per	Hk. Tls.	Duty Rate Hk. Tls.
Canned Goods, Unenumerated	value	5 per cent.	—
Chocolate	"	"	—
Cocoa	"	"	—
Coffee	"	"	—
Currants and Raisins, in bulk	picul	12.577	0.63
Fruits, Preserved, in Glass, etc.	value	5 per cent.	—
Honey	"	"	—
Jams and Jellies	"	"	—
Lard, in bulk	"	"	—
Macaroni and Vermicelli, in bulk	picul	9.125	0.46
Margarine	value	5 per cent.	—
Meats, Dried and Salted	"	"	—
Pork Rind	"	"	—
Sausages, Dry	"	"	—
Soy	picul	5.000	0.25
Tea	value	5 per cent.	—

Cereals, Fruits, Medicinal Substances, Seeds,

Spices, and Vegetables:—

Aniseed, Star:

(a) 1st Quality (value Hk. Tls. 15 and over per picul) ... picul 20.000 1.00

(b) 2nd Quality (value under Hk. Tls. 15 per picul) ... " 9.000 0.45

Apples, Fresh ... " 5.000 0.25

Asafetida ... value 5 per cent. —

Barley, Pearl ... " —

Beans and Peas ... " —

Betelnuts, Dried ... picul 4.700 0.24

Betelnut Husk, Dried ... " 2.300 0.12

Bran ... " 1.600 0.08

Cereals and Flour (including Barley, Maize, Millet, Oats, Paddy, Rice, Wheat, and Flour made therefrom; also Buckwheat and Buckwheat Flour, Cornflour and Yellow Corn Meal, Rye Flour, and Hovis Flour; but not including Arrowroot and Arrowroot Flour, Cracked Wheat, Germea, Hominy, Pearl Barley, Potato Flour, Quaker Oats, Rolled Oats, Sago and Sago Flour, Shredded Wheat, Tapioca and Tapioca Flour, and Yam Flour) ... — free —

Camphor, Crude and Refined (including shaped) ... picul 66.000 3.30

Camphor, Baroos, Clean ... catty 62.000 3.10

Camphor, Baroos, Refuse ... value 5 per cent. —

Capoor Cutchery ... " —

Cardamom Husk ... picul 5.000 0.25

Cardamoms, Inferior ... " 29.000 1.00

Cardamoms, Superior ... " 200.000 10.00

Cassia Lignea and Buds ... " 18.000 0.90

Cassia Twigs ... " 3.600 0.18

Chestnuts ... value 5 per cent. —

China-root ... picul 14.000 0.70

Cinnamon, in bulk ... picul 100.000 5.00

Cloves, in bulk ... " 18.000 0.90

Cloves, Mother ... " 8.000 0.40

Cocaine ... value 5 per cent. —

Galangal ... picul 3.700 0.19

Ginseng, Clarified or Cleaned:

1st Quality (value over Hk. Tls. 25 per catty) ... catty 56.000 2.80

2nd Quality (value over Hk. Tls. 11 and not over Hk. Tls. 25 per catty) ... " 22.000 1.10

3rd Quality (value over Hk. Tls. 3 and not over Hk. Tls. 11 per catty) ... " 7.200 0.36

4th Quality (value not over Hk. Tls. 3 per catty) ... " 1.800 0.09

Ginseng, Crude, Beard, Roots, and Cuttings:

1st Quality (value over Hk. Tls. 3 per catty) ... " 4.400 0.22

2nd Quality (value not over Hk. Tls. 3 per catty) ... " 1.700 0.085

Ginseng, Wild ... value 5 per cent. —

Groundnuts, in Shell ... picul 3.000 0.15

Groundnuts, Shelled ... " 4.600 0.23

Hops ... value 5 per cent. —

Isinglass, Vegetable ... picul 53.000 2.70

Lemons, Fresh ... thousand 29.000 1.50

Lichees, Dried ... picul 10.600 0.53

Lily Flowers, Dried ... " 9.400 0.47

Lungngan Pulp ... " 13.000 0.65

Lungngans, Dried ... " 7.600 0.38

Malt ... " 8.102 0.41

Morphia in all forms ... value 5 per cent. —

Mushrooms ... picul 47.000 2.40

Nutmegs ... " 30.000 1.50

Name of Article	Agreed Value		Proposed
	Per	Hk. Tls.	Duty Rate Hk. Tls.
Olives	value	5 per cent.	—
Opium, Tincture of	"	"	—
Oranges, Fresh	picul	3.600	0.18
Peel, Orange, in bulk	"	13.000	0.65
Pepper, Black	"	19.400	0.97
Pepper, White	"	32.000	1.60
Potatoes, Fresh	value	5 per cent.	—
Putchuck	picul	33.000	1.90
Seed, Apricot	"	26.300	1.30
Seed, Lily Flower (i.e., Lotus-nuts without Husks)	picul	20.000	1.00
Seed, Lucraban	"	7.000	0.35
Seed, Melon	"	11.000	0.55
Seed, Pine (i.e., Fir-nuts)	"	4.800	0.24
Seed, Sesamum	"	4.800	0.24
Vegetables, Dried, Prepared, and Salted	value	5 per cent.	—

Sugar:—

Sugar, Brown, under No. 11 Dutch Standard, and "Green Sugar" ... picul 4.400 0.22

Sugar, White, over No. 10 Dutch Standard (including Refined Sugar) ... " 6.200 0.31

Sugar, White, Cube and Loaf ... " 10.000 0.50

Sugar, Candy ... " 7.400 0.37

Sugar, Cane ... " 1.000 0.05

Wines, Beer, Spirits, Table Waters, etc.:—

Champagne and any other Wine sold under the label "Champagne" ... { Case of 12 bottles or 24 ½-bottles } 20.000 1.00

Sparkling Asti ... " 10.000 0.50

Other Sparkling Wines ... " 12.500 0.60

Still Wines, Red or White, exclusively the produce of the natural fermentation of grapes (not including Vins de Liqueur) ... half-bottles

(1) In Bottles ... { Case of 12 bottles or 24 ½-bottles } 6.500 0.30

(2) In bulk ... Imperial gallon 0.760 0.035

Port Wine, in Bottles ... { Case of 12 bottles or 24 ½-bottles } 14.000 0.70

Port Wine, in bulk ... Imperial gallon 3.500 0.18

Marsala, in Bottles ... { Case of 12 bottles or 24 ½-bottles } 9.000 0.40

Marsala, in bulk ... Imperial gallon 2.000 0.10

Vins de Liqueur other than Port and Marsala (viz., Madeira, Malaga, Sherry, etc.):—

(1) In Bottles ... { Case of 12 bottles or 24 ½-bottles } 10.000 0.50

(2) In bulk ... Imperial gallon 3.000 0.15

Vermouth, Byrrh, and Quinquina ... Case of 12 litres 5.850 0.29

Saké, in Barrels ... picul 9.200 0.41

Saké, in Bottles ... { 12 reputed quarts or 24 reputed pints } 2.000 0.10

Ale, Beer, Cider, Perry, and similar Liquors made of Fruits and Berries:—

(1) In Bottles ... { 12 reputed quarts or 24 reputed pints } 1.530 0.079

(2) In Casks ... Imperial gallon 0.540 0.027

Porter and Stout, in Bottles ... { 12 reputed quarts or 24 reputed pints } 2.560 0.13

Porter and Stout, in Casks ... Imperial gallon 0.550 0.029

Brandy, Cognac, and Whisky, in bulk ... " 2.600 0.13

Brandy and Cognac, in Bottles ... { Case of 12 reputed quarts } 13.400 0.67

Whisky, in Bottles ... " 7.000 0.35

Gin, in Bottles ... " 4.600 0.23

Gin, in bulk ... Imperial gallon 1.800 0.09

Other Spirits (i.e., Rum, Aquavit, Vodka, Punch, etc.):—

(1) In Bottles ... { Case of 12 reputed quarts } 4.000 0.20

Name of Article	Agreed Value		Proposed Duty Rate
	Per	Hk. Tls.	
(2) In bulk	Imperial gallon	1.800	0.09
Liqueurs	{ 12 reputed quarts or 24 reputed pints }	10.900	0.50
Waters, Table, Aerated and Mineral ...	12 bottles or 24 ½-bottles	1.400	0.07
Spirits of Wine and Rectified Spirits or Alcohol	{ Imperial gallon }	0.560	0.028

TOBACCO.

Cigarettes, value over Hk. Tls. 4.50 per 1,000 and all Cigarettes not bearing a distinctive brand or name on each Cigarette	Thousand	6.600	0.33
Cigarettes, value over Hk. Tls. 3.00 but not over Hk. Tls. 4.50 per 1,000... ..	"	3.800	0.19
Cigarettes, value over Hk. Tls. 1.50 but not over Hk. Tls. 3.00 per 1,000... ..	"	2.200	0.11
Cigarettes, value Hk. Tls. 1.50 or less per 1,000	"	1.200	0.06
Cigars	"	16.000	0.80
Snuff	value	5 per cent.	—
Tobacco, Leaf	picul	22.000	1.10
Tobacco, Prepared, in tins or packages under 5-lb. each	value	5 per cent.	—
Tobacco, Prepared, in bulk (not packed in tins or tin-lined cases)	picul	22.000	1.10
Tobacco, Stalk	"	5.600	0.28

CHEMICALS AND DYES.

Chemicals:—

Acid, Acetic	picul	30.639	1.50
Acid, Boracic	"	21.448	1.10
Acid, Carbolic	value	5 per cent.	—
Acid, Hydrochloric (i.e., Muriatic) ...	value	5 per cent.	—
Acid, Nitric	picul	14.282	0.71
Acid, Sulphuric	"	3.317	0.17
Ammonia, in bulk	"	26.513	1.30
Ammonia, Chloride of (i.e., Sal Am- moniac)	"	17.823	0.89
Ammonia, Sulphate of	"	7.438	0.37
Bleaching Powder (i.e., Chloride of Lime)	"	5.469	0.27
Borax, Crude or Refined	"	11.521	0.58
Calcium, Carbide of	"	7.451	0.37
Copper, Sulphate of	"	11.313	0.60
Glycerine	"	43.930	2.20
Hide Specific	value	5 per cent.	—
Manure, Animal, Chemical, or Artificial, not otherwise enumerated	picul	2.951	0.15
Naphthalene	"	12.653	0.63
Saltpetre	"	9.324	0.47
Soda Ash	"	2.499	0.12
Soda, Bicarbonate of, in bulk	"	2.899	0.14
Soda, Caustic	"	6.200	0.31
Soda, Crystal	"	2.659	0.13
Soda, Crystal Concentrated	"	3.178	0.16
Soda, Nitrate of (Chile Saltpetre)... ..	"	5.342	0.27
Soda, Silicate of	"	3.603	0.18

Dyes and Pigments:—

Aniline Dyes not otherwise enumerated ...	value	5 per cent.	—
Bark, Mangrove	picul	1.682	0.034
Bark, Plum-tree	"	3.187	0.16
Bark, Yellow (for Dyeing)	"	4.948	0.25
Blue, Paris or Prussian	"	34.945	1.70
Bronze Powder	"	52.979	2.60
Carbon Black (i.e., Lampblack)	"	20.000	1.00
Carthamin	value	5 per cent.	—
Chrome Yellow	"	5 per cent.	—
Cinnabar	picul	82.400	4.10
Cobalt, Oxide of	value	5 per cent.	—
Cochineal	value	5 per cent.	—
Cunao or False Gambier	picul	3.340	0.17
Cutch or Gambier	"	10.000	0.50
Dyes and Colours, Unclassed	value	5 per cent.	—
Gamboge	picul	56.951	2.80
Green, Emerald, Schweinfurt, or Imitation	"	22.453	1.10
Hartall (Orpiment)	"	9.562	0.48
Indigo, Dried, Artificial	"	125.881	6.30
Indigo, Liquid, Natural	"	6.000	3.00
Indigo, Liquid or Paste, Artificial	"	40.000	2.00
Indigo, Liquid Natural	"	6.000	0.30
Indoin	value	5 per cent.	—
Laka-wood	picul	3.272	0.16
Lead, Red, White, and Yellow	"	10.294	0.51
Logwood Extract	"	15.482	0.77
Nutgalls	"	20.863	1.00

Name of Article	Agreed Value		Proposed Duty Rate
	Per	Hk. Tls.	
Ochre	picul	6.545	0.33
Safflower	"	12.908	0.55
Sapanwood	"	2.744	0.14
Smalt	"	40.150	2.00
Turmeric	"	3.938	0.20
Ultramarine	"	13.862	0.59
Vermilion	"	82.400	4.10
Vermilion, Artificial	value	5 per cent.	—
White Zinc	"	5 per cent.	—

CANDLES, GUMS, OILS, SOAP, VARNISHES, WAX AND
MANUFACTURES OF.

Candles	picul	12.600	0.63
Candlewick	"	75.200	3.80
Gasolene, Naphtha, and Benzine, Mineral:			
(a) In bulk	10 Am. galls.	3.000	0.15
(b) In case	{ Case of 2 tins, each of 5 Am. gallons }	3.500	0.18
Grease, Lubricating, wholly or partly mineral	picul	7.000	0.35
Gum Arabic	"	24.000	1.20
Gum Benjamin	"	12.000	0.60
Gum Copal	"	24.000	1.20
Gum Dragon's-blood	"	60.000	3.00
Gum Myrrh	"	9.600	0.48
Gum Olibanum	"	9.600	0.48
Gum Resin	"	6.800	0.34
Gum Shellac	"	40.000	2.00
Gum Sticklac	"	15.000	0.75
Gum Tragacanth	"	18.000	0.90
Oil, Castor, Lubricating	"	12.000	0.60
Oil, Castor, Medicinal	value	5 per cent.	—
Oil, Coconut	picul	16.000	0.80
Oil, Kerosene:			
(a) In case	{ Case of 2 tins, each of 5 Am. gallons }	2.200	0.11
(b) In bulk	10 Am. galls.	1.600	0.08
(c) Tins, empty	tin	0.200	0.01
(d) Case and two empty tins	each	0.540	0.027
Oil, Linseed	Imperial gallon	1.200	0.06
Oil Lubricating:			
(a) Wholly or partly of Mineral origin	Am. gall.	0.300	0.015
(b) Other kinds, not otherwise en- umerated	"	0.500	0.025
Oil, Olive, in bulk	Imperial gallon	2.000	0.10
Soap, Household and Laundry (including Blue Mottled), in bulk, Bars, and Doublets: duty to be charged on nominal weights, provided that such weights be not less than true weights and that a bar does not weigh less than 7-oz.	picul	8.800	0.44
Soap, Toilet and Fancy	value	5 per cent.	—
Stearine	picul	19.600	0.98
Turpentine:			
(a) Mineral	Imperial gallon	0.600	0.03
(b) Vegetable	"	0.800	0.04
Wax, Bees, Yellow	picul	32.000	1.60
Wax, Paraffin	"	10.000	0.50
Wax, Vegetable	"	15.200	0.76

PAPER, WOOD PULP, BOOKS AND MAPS.

Paper, Cigarette, on bobbins	picul (Incl. weight of bobbin.)	40.00	2.00
Paper, Common Printing, Calendered and Uncalendered, Sized and Unsized, White and Coloured	picul	6.40	0.32
Paper, Marbled, Enamelled, and Glazed Flint	"	12.20	0.61
Paper, M. G. Cap, White and Coloured ...	picul	6.40	0.32
Paper, Packing and Wrapping, Brown or Coloured	"	6.40	0.32
Paper, Printing, Calendered and Uncalen- dered, Sized and Unsized, White and Coloured (including Simile and M. G. Poster, but not including Printing Paper otherwise enumerated), free of mechanical wood pulp	"	9.20	0.46
Paper, Strawboard	value	5 per cent.	—
Paper, Unenumerated	"	"	—

Name of Article	Agreed Value		Proposed Duty Rate	
	Per	Hk. Tls.	Hk. Tls.	
Paper, Unglazed Tissue and M. G. Bleached Sulphite, free of mechanical wood pulp	picul	10.00	0.50	
Paper, Writing, Drawing, Art Printing, Bank-note, Parchment, Pergamyn, and Grease-proof	value	5 per cent.	—	
Wood Pulp, Chemical	picul	5.60	0.30	
Wood Pulp, Mechanical:—				
(a) Dry	picul	3.32	0.17	
(b) Wet (not containing less than 40 per cent. moisture)	"	1.66	0.083	
Books	—	free	—	
Charts and Maps	—	"	—	
Newspapers and Periodicals	—	"	—	

ANIMAL SUBSTANCES, RAW AND PREPARED.

Hides, Leather, and Skins (Furs):—

Hides, Buffalo and Cow	picul	22.00	1.10
Leather Belting...	value	5 per cent.	—
Leather, Calf, Kid, Enamelled, Japanned, Patent, and/or Coloured	picul	300.00	15.00
Leather, Cow (including that for Soles and Harness)	picul	58.00	2.90
Leather, Cow, Enamelled, Japanned, and Patent	"	180.00	9.00
Skins (Furs), Beaver	value	5 per cent.	—
Skins (Furs), Dog	"	"	—
Skins (Furs), Fox	"	"	—
Skins (Furs), Fox, Arctic, White	"	"	—
Skins (Furs), Fox Legs	"	"	—
Skins (Furs), Fox Legs	"	"	—
Skins (Furs), Fox, Red	"	"	—
Skins (Furs), Goat, Tanned...	"	"	—
Skins (Furs), Goat, Untanned	"	"	—
Skins (Furs), Hare and Rabbit	"	"	—
Skins (Furs), Lamb	"	"	—
Skins (Furs), Lamb, Unborn	"	"	—
Skins (Furs), Land-otter	"	"	—
Skins (Furs), Lynx	"	"	—
Skins (Furs), Marten, Untanned	"	"	—
Skins (Furs), Musquash	"	"	—
Skins (Furs), Raccoon	"	"	—
Skins (Furs), Sable	"	"	—
Skins (Furs), Sheep, Untanned	"	"	—
Skins (Furs), Squirrel	"	"	—
Skins (Furs), Wolf	"	"	—

Bones, Feathers, Hair, Horns, Shells, Sinews,

Tusks, etc.:—

Bones, Tiger	picul	56.00	2.80
Cow Bezoar, Indian	value	5 per cent.	—
Crocodile and Amadillo Scales	picul	59.00	3.00
Elephants' Tusks, Whole or Parts of	catty	3.60	0.18
Feathers, Kingfisher, Whole Skins...	hundred	12.00	0.60
Feathers, Kingfisher, Part Skins (i.e., Wings, Tails, or Backs)	"	3.00	0.40
Feathers, Peacock	value	5 per cent.	—
Hair, Horse	picul	42.00	2.10
Hair, Horse Tails	"	50.00	2.50
Horns, Buffalo and Cow	"	13.00	0.65
Horns, Deer	"	34.00	1.70
Horns, Deer, Old	"	140.00	7.00
Horns, Deer, Young (Northern)	pair	50.00	2.50
Horns, Deer, Young (Southern)	value	5 per cent.	—
Horns, Rhinoceros	catty	80.00	4.00
Musk	"	180.00	9.00
Sea-horse Teeth...	value	5 per cent.	—
Sinews, Cow and Deer...	picul	20.00	1.00

TIMBER, WOOD, BAMBOOS AND RATTANS.

Timber:—

Laths	1,000 pieces	4.20	0.21
Ordinary (not including Teak and other enumerated Woods), Rough Hewn:			
Hardwood	1,000 sup. ft., B.M.	29.00	1.45
Softwood	"	23.00	1.15
Ordinary, Sawn:			
Hardwood	1,000 sup. ft., B.M.	36.00	1.80
Softwood	"	30.00	1.50
Ordinary, Manufactured (including any process further than simple sawing), exclusive of Masts and Spars:			
Hardwood:			
(a) Clear	1,000 sup. ft., net measure	60.00	3.00
(b) Merchantable	"	42.00	2.10

Name of Article	Agreed Value		Proposed Duty Rate	
	Per	Hk. Tls.	Hk. Tls.	
Softwood:				
(a) Clear	1,000 sup. ft., net measure	50.00	2.50	
(b) Merchantable	"	36.00	1.80	
Ordinary, Masts and Spars	value	5 per cent.	—	
Railway Sleepers	"	"	—	
Teak-wood, Beams and Planks	1,000 sup. ft., B.M.	135.00	6.75	
Wood, Bamboos, Rattans, etc.:—				
Canes, Bamboo	thousand	8.40	0.42	
Rattan Skin	picul	15.00	0.75	
Rattans, Core or Whole	"	6.41	0.32	
Rattans, Split	"	6.70	0.34	
Wood, Camagon	"	3.20	0.16	
Wood, Camphor	value	5 per cent.	—	
Wood, Ebony	"	"	—	
Wood, Fragrant	"	"	—	
Wood, Garoo	catty	2.40	0.12	
Wood, Kranjee	value	5 per cent.	—	
Wood, Laka. See Dyes.				
Wood, Lignum-vitæ	value	5 per cent.	—	
Wood, Oil	"	"	—	
Wood, Puru	catty	1.80	0.09	
Wood, Red and Rose	"	4.10	0.21	
Wood, Sandal	picul	8.60	0.43	
Wood, Sandal Dust	value	5 per cent.	—	
Wood, Span. See Dyes.				
Wood, Scale Sticks	piece	0.18	0.009	
Wood, Scented	value	5 per cent.	—	
Wood, Shavings, Hinoki	"	"	—	
Wood, Veneer	"	"	—	

In this Tariff, by Softwood is meant the wood of any coniferous tree and of all trees with "needle" or spiuous leaves, e.g., Pines, Firs, Spruces, Larches, Cedars, Yews, Junipers, and Cypressess. The wood of all trees with broad leaves is to be classed as Hardwood.

COAL, FUEL, PITCH AND TAR.

Coal	ton	5.400	0.27
Coal, Briquettes	"	10.000	0.50
Charcoal	picul	1.093	0.05
Coke	ton	10.902	0.55
Liquid Fuel	"	14.572	0.73
Pitch	picul	4.799	0.24
Tar, Coal	"	1.600	0.08

CHINAWARE, ENAMELLED WARE, GLASS, ETC.

Basins, Tin	gross	6.000	0.30
China ware	value	5 per cent.	—
Enamelled Ironware:—			
Mugs, Cups, Basins, and Bowls, not over 11 centimetres in diameter	dozen	1.000	0.05
Basins and Bowls, over 22 centimetres but not over 35 centimetres in diameter	"	2.000	0.10
Enamelled Ironware, Unenumerated	value	5 per cent.	—
Glass and Crystal Ware	"	"	—
Glass Plate, Silvered, Bevelled or Unbevelled, not over 5 square feet each	square foot	0.560	0.028
Glass Plate, Silvered, Bevelled or Unbevelled, over 5 square feet each	"	0.840	0.042
Glass Plate, Unsilvered...	value	5 per cent.	—
Glass Window, Common, not over 32 oz. in weight per square foot	100 sq ft.	5.000	0.25
Glass Window, Coloured	"	12.500	0.60
Glass Mirrors. See No. 589	value	5 per cent.	—

EARTH, PRECIOUS STONES, STONES AND ARTICLES MADE OF.

Amber	"	"	—
Cement	picul	0.900	0.045
Coral Beads...	catty	15.000	0.80
Cornelian Beads	value	5 per cent.	—
Cornelian Stones, Rough...	hundred	6.000	0.30
Corundum Sand	picul	3.800	0.19
Emery and Glass Powder. See No. 564	"	2.400	0.12
Emery-cloth and Sand-paper. See No. 577...			
Fire-bricks	value	5 per cent.	—
Fireclay	picul	1.220	0.061
Flints (including Flint Pebbles)	"	0.800	0.04
Tiles	value	5 per cent.	—

MISCELLANEOUS.

Asbestos:—

Asbestos Boiler Composition...	picul	3.600	0.18
Asbestos Fibre and Metallic Packing	"	54.000	3.20
Asbestos Millboard	"	8.000	0.40
Asbestos Sheets and Packing	"	44.000	2.20
Asbestos Yarn	"	40.000	2.00

	Name of Article	Agreed Value	Proposed Duty Rate
		Per Hk. Tls.	Hk. Tls.
Bags, Mats, and Matting:—			
529	Bags, Cotton, New	picul 40.600	2.00
	Bags, Gunny, New. See No. 57	" 8.480	0.42
	Bags, Gunny, Old. See No. 58	value 5 per cent.	—
	Hemp or Hessian Bags, New. See No. 60	picul 13.900	0.95
	Hemp or Hessian Bags, Old. See No. 61	value 5 per cent.	—
	Bags, Straw and Grass	thousand 30.600	1.50
	Mats, Coir (Door)	dozen 8.000	0.40
	Mats, Fancy	value 5 per cent.	—
	Mats, Formosa Grass (Bed)	each 4.700	0.24
	Mats, Rattan	value 5 per cent.	—
	Mats, Rush	hundred 71.000	3.60
	Mats, Straw	" 5.100	0.26
	Mats, Tatami	each 0.320	0.016
	Matting, Coir, 36-in. by 100 yds.	roll of 100 yards 37.100	1.90
	Matting, Straw, 36-in. by 40 yds.	roll of 40 5.000	0.25
Buttons:—			
	Buttons, Fancy (Glass, Jewellery, etc.) ...	value 5 per cent.	—
	Buttons, Metal (not including those made of Precious Metals or plated with Precious Metals)	gross 0.400	0.02
	Buttons, Porcelain	12 gross 0.340	0.017
	Buttons, Shell	gross 0.420	0.021
Fans, Umbrellas, and Sunshades:—			
	Fans, Palm-leaf, Coarse	thousand 7.000	0.35
	Fans, Palm-leaf, Fancy	" 20.000	1.00
	Fans, Palm-leaf, Fine	" 12.000	0.60
	Fans, Paper or Cotton	" 47.000	2.40
	Fans, Silk	value 5 per cent.	—
	Umbrellas and Sunshades:		
	With Handles wholly or partly of Precious Metals, Ivory, Mother-of-Pearl, Tortoiseshell, Agate, etc., or Jewelled	value 5 per cent.	—
	With all other Handles, all Cotton:		
	(a) Length of rib not over 17-in.	value 5 per cent.	—
	(b) Length of rib over 17-in.	each 0.440	0.022
	With all other Handles, Mixtures, not Silk	" 0.730	0.037
	With all other Handles, Silk and Silk Mixtures	" 1.300	0.065
Files and Needles:—			
	Files of all kinds:		
	Filing surface only, not over 4-in. long	dozen 1.300	0.065
	Filing surface only, over 4-in. but not over 9-in. long	" 2.700	0.14
	Filing surface only, over 9-in. but not over 14-in. long	" 5.000	0.25
	Filing surface only, over 14-in. long	" 12.000	0.60
	Needles, Nos. 7/0 and 6/0	100 mile 54.000	2.70
	Needles, Nos. 3/0 and 2/0	" 50.000	2.50
	Needles, Assorted (not including 7/0)	" 40.000	2.00
Matches and Match-making Materials:—			
	Matches, Wood, Safety or other:		
	Small, in boxes not over 2-in. by 1½-in. by ½-in.	100 gross box 18.400	0.92
	Large, in boxes not over 2½-in. by 1½-in. by ¾-in.	50 gross box 16.000	0.80
	In boxes over above sizes	value 5 per cent.	—
564	Chlorate of Potash	picul 36.000	1.80
	Emery and Glass Powder	" 2.400	0.12
	Labels	value 5 per cent.	—
	Phosphorus	picul 70.000	3.50
	Wax, Paraffin. See No. 406	" 10.000	0.50
	Wood Shavings	" 2.200	0.11
	Wood Splints	" 2.000	0.10
Metal Threads and Foil:—			
	Thread, Gold, Imitation, on Cotton	catty 3.000	0.15
	Thread, Silver, Imitation, on Cotton	" 1.500	0.09
	Thread, Gold and Silver, Imitation, on Silk	value 5 per cent.	—
	Tinfoil	picul 63.000	3.20
Sundry:—			
	Bamboo Baskets, Bamboo Blinds, and other Bamboo Ware	value 5 per cent.	—
	Bent-wood Chairs	" 5 per cent.	—
	Coir Yarn	" 5 per cent.	—
	Cordage and Twine	" 5 per cent.	—
577	Emery-cloth and Sand-paper (sheet not over 144 square inches)	ream 5.000	0.25
	Furniture and other Woodware	value 5 per cent.	—
	Glue (not including Fish Glue)	picul 20.000	1.00
	Glue, Cow, Refuse	" 20.000	1.00
	Glue, Fish	" 75.857	3.80

	Name of Article	Agreed Value		Proposed Duty Rate	
		Per	Hk. Tls.	Hk. Tls.	
	India-rubber and Gutta-percha, Crude ...	value	5 per cent.	—	
	India-rubber, Old or Waste	"	5 per cent.	—	
	Inks of all kinds	"	5 per cent.	—	
	Insect Powder	"	5 per cent.	—	
	Lampwick	picul	54.600	2.70	
	Leather Purses	gross	11.200	0.56	
	Machines, Sewing and Knitting	value	5 per cent.	—	
589	Mirrors	"	5 per cent.	—	
	Moulding, Picture	"	5 per cent.	—	
	Oakum	picul	12.600	0.63	
	Rope	value	5 per cent.	—	
	Shoes and Boots	"	5 per cent.	—	
	Starch	"	5 per cent.	—	
	Sulphur	"	5 per cent.	—	
	Tinder	picul	9.000	0.45	
	Worm Tablets, in Bottles, not over 60 pieces	dozen	0.740	0.037	

UNENUMERATED GOODS.

Unenumerated Goods	value	5 per cent.	—
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RULES.

RULE I.

Imports unenumerated in this Tariff will pay Duty at the rate of 5 per cent. ad valorem; and the value upon which Duty is to be calculated shall be the wholesale market value of the goods in local currency. This market value when converted into Haikwan Taels shall be considered to be 12 per cent. higher than the amount upon which Duty is to be calculated.

If the goods have been sold before presentation to the Customs of the Application to pay Duty, the gross amount of the *bona fide* contract will be accepted as evidence of the market value. Should the goods have been sold on c. f. and i. terms, that is to say, without inclusion in the price of Duty and other charges, such c. f. and i. price shall be taken as the value for Duty-paying purposes without the deduction mentioned in the preceding paragraph.

If the goods have not been sold before presentation to the Customs of the Application to pay Duty, and should a dispute arise between Customs and importer regarding the value or classification of goods, the case will be referred to a Board of Arbitration composed as follows:—

An official of the Customs;

A merchant selected by the Consul of the importer; and

A merchant, differing in nationality from the importer, selected by the Senior Consul.

Questions regarding procedure, etc., which may arise during the sitting of the Board shall be decided by the majority. The final finding of the majority of the Board, which must be announced within fifteen days of the reference (not including holidays), will be binding upon both parties. Each of the two merchants on the Board will be entitled to a fee of Ten Haikwan Taels. Should the Board sustain the Customs valuation, or in the event of not sustaining that valuation, should it decide that the goods have been undervalued by the importer to the extent of not less than 7½ per cent., the importer will pay the fees; if otherwise, the fees will be paid by the Customs. Should the Board decide that the correct value of the goods is 20 per cent. (or more) higher than that upon which the importer originally claimed to pay Duty, the Customs authorities may retain possession of the goods until full Duty has been paid and may levy an additional Duty equal to four times the Duty sought to be evaded.

In all cases invoices, when available, must be produced if required by the Customs.

RULE II.

The following will not be liable to Import Duty: Foreign Rice, Cereals, and Flour; Gold and Silver, both Bullion and Coin; Printed Books, Charts, Maps, Periodicals, and Newspapers.

A freight or part freight of Duty-free commodities (Gold and Silver Bullion and Foreign Coins excepted) will render the vessel carrying them, though no other cargo be on board, liable to Tonnage Dues.

Drawbacks will be issued for Ships' Stores and Bunker Coal when taken on board.

RULE III.

Except at the requisition of the Chinese Government, or for sale to Chinese duly authorized to purchase them, Import trade is prohibited of all Arms, Ammunition, and Munitions of War of every description. Permit to land them will be issued until the Customs have proof that necessary authority has been given to the importer. Infraction of this rule will be punishable by confiscation of all the goods concerned. The import of Salt is absolutely prohibited.